DOCUMENT RESUME

ED 230 427 SE 041 922

AUTHOR Barile, Diane
TITLE Man Meets Coast. A Game of Coastal Issues.
INSTITUTION Florida Univ., Gainesville. Florida Sea Grant College Program.
SPONS AGENCY National Oceanic and Atmospheric Administration (DOC), Rockville, Md. National Sea Grant Program.
PUB DATE Jul 82
GRANT 04-8-M01-76
NOTE 99p.
PUB TYPE Guides - Classroom Use - Materials (For Learner) (051)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS *Citizen Participation; *Decision Making; *Ecology; Educational Games; *Environmental Education; Land Use; Oceanography; Physical Environment; Policy Formation; *Role Playing; Secondary Education
IDENTIFIERS *Coastal Zones; *Marine Education

ABSTRACT

Provided is an educational game in which 30 to 75 players temporarily assume new identities to explore and resolve various coastal issues facing a ficitious community. Designed for both adults and junior/senior high school students, the game: (1) demonstrates the interrelationship between the natural marine environment and human systems; (2) teaches about coastal processes and resources by focusing attention on benefits and vulnerabilities of these systems; and (3) provides an opportunity to become involved in decision-making in situations related to management of coastal resources. The game, which takes approximately 90-120 minutes, proceeds from neighborhood meetings of common interest groups (fishermen, developers, conservationists, tourists, and others) and concludes in a county commission hearing to decide policies regarding such common issues as fishing in canals, dredging of a ship channel, and coastal water supply regulation. Game instructions, player materials (provided in four appendixes), and a cartoon booklet ("Man Meets Coast") are included. (JN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED230427

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
✓ This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

MAN MEETS COAST

A Game of Coastal Issues

Developed by Diane Barile*

"Man Meets Coast" is an educational game in which 30 to 75 players assume new identities for one and a half to two hours, to explore and resolve various coastal issues facing their fictitious community. Both adults and junior-senior high school students enjoy the role-playing experience and the group dynamics of participating in decision making.

The game proceeds from: neighborhood meetings to meetings of common interest groups (e.g., fishermen, developers, conservationists, tourists, businessmen, etc.), and concludes in a county commission hearing to decide policies regarding such common issues as fishing in canals, dredging of a ship channel, and coastal water supply regulation.

This game was developed as part of an educational package which also include a cartoon booklet, "Man Meets Coast." This booklet is included as an enclosure and may be used to provide general background information to the players. Multiple copies of the booklet are available at cost plus postage and handling (total $.30 each) from the Sea Grant Advisory Program, G022 McCarty Hall, University of Florida, Gainesville, FL 32611. Checks should be made payable to the University of Florida and all orders from Florida locations should include 5 percent sales tax.

The third part of the package is a slide/tape show with the same title. It contains 95 color slides and a narration which follows the same general story line as the cartoon booklet. It may be obtained on loan at no charge from Motion Picture Service, Building 116, IFAS, University of Florida, Gainesville, FL 32611. The slide/tape show may also be available from the Sea Grant marine advisory agent in coastal county Extension offices.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
T. M. Leahy
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

SE041922

*Florida Institute of Technology and City of Palm Bay. This coastal game was developed under a grant from Florida Sea Grant College. Project E-P-1. Grant number 04-8-M01-76.

CONTENTS

GENERAL INFORMATION AND INSTRUCTIONS 1

Introduction. 1

Purpose 1

Intended Audiences 1

Format 1

Procedures 2

APPENDIX A -- GAME SCENARIO 4

APPENDIX B -- HANDOUT MATERIAL. 8

Map of Big Bay County 9

Big Bay Gazette 10

Player's Guide and meeting instructions. 12

Agenda items for county commission meeting. 13

Oath of Office 15

APPENDIX C -- PLAYER IDENTITIES. 16

Master List of Names 17

Character Profiles 18

Name Tags 23

APPENDIX D -- SPECIAL INTEREST SIGNS 42

ENCLOSURE: CARTOON BOOKLET, "MAN MEETS COAST"

GENERAL INFORMATION AND INSTRUCTIONS

INTRODUCTION

Since the beginning, the sea has lured man almost irresistibly to its shores. With the first boat, man's horizons expanded; for he was no longer confined on the land, but could explore beyond it, out into the sea; to expand fishing grounds, to seek new worlds, until today he moves over and under the sea almost as easily as he drives to work.

In large numbers he has migrated to coastal areas until, in the United States, more than half the population lives within 50 miles of the oceans and Great Lakes. This coastal strip is a fragile area harboring not only large urban centers with extensive industrial development, but also breeding grounds for various species of marine life.

To provide for the needs of those who settle in coastal areas, and at the same time to assure the preservation of the nation's valuable coastal and marine resources, man must learn to achieve that delicate balance between complete exploitation on the one hand and pure conservation on the other.

The problem is to make the resources available to those who have need of them now, while insuring that they will also be available for those who come later. Theodore Roosevelt once said, "A nation behaves well if the natural resources and assets which one generation must turn over to the next generation are increased and not impared in value." This, of course, requires that each generation be educated in the wise use of their legacy of these natural resources.

PURPOSE

To that end this game was prepared. It has been designed to 1) demonstrate to the participants the interrelationship between the natural marine environment and human systems; 2) to teach them about coastal processes and resources by focusing attention on the benefits and vulnerabilities of these systems; and 3) to provide an opportunity for them to become involved in decision making in situations involving management of coastal resources. In summary, to show them in as realistic a situation as possible, the dynamic relationship between man and nature in the coastal areas where land meets the sea.

INTENDED AUDIENCES

The Man Meets Coast Game is appropriate for groups ranging from eighth grade to adult. Such groups would include formal school classes or extracurricular organizations; youth groups such as 4-H, Scouts, etc.; and civic organizations interested in either the types of generic issues addressed or the process by which issues are resolved in the public arena. When used in the school setting it is suggested that classes be combined to increase the number of participants and to diversify their experiences. For example, the combination of a science class, involved in a marine or ecology section, with a civics, political science, or social studies class would provide enough individuals for representative group dynamics while at the same time ensuring the blend of backgrounds well suited to this exercise.

FORMAT

Big Bay County, the fictitious setting for the game, is presented as a model of a hypothetical coastal community. The players assume roles corresponding to a real life situation which helps them develop a perspective relative to the economic, social and ecological constraints inherent in a coastal environment. Throughout the game, the players are free to apply their own rationale and to utilize their communication skills in confronting the problems that arise.

The game involves a series of meetings of various combinations of interest groups representing Big Bay County. Players are given an identity which they will assume during the game. Each participant's role is defined in terms of a set of problems facing the community.

The time consumed for the game varies from about 80 minutes to 120 minutes depending upon the interest generated by the participants. The first 20 minutes is devoted to grouping the participants in the game room, reviewing the rules of the game, and giving them an overview of Big Bay County to reinforce the information previously given them to study.

The game begins with the neignborhood meetings, followed by caucus meetings to arrange lobbying efforts in support of their special interests, and finally the meeting of the county commission where the issues are addressed or problems solved.

PROCEDURES

Preparing/procuring materials for the game

The teacher or game coordinator will prepare and procure the following materials for use in the game. These materials may be reused if desired so that if it is planned to use the game on a recurring basis the materials need only be prepared once:

- --Copy name tags in Appendix C. Each player must have one tag. The tags can be pinned or tapped on or slipped into plastic name tag holders.
- --Copy for each participant the handout materials in Appendix B. Include one each of the following: Map of Big Bay County, the Big Bay Gazette, information about neighborhood, caucus, and commission meetings, agenda items, and (optional) schedule of events.
- --Copy one each of the special interest group signs (Appendix D) and the character profiles (Appendix C).
- --Prepare number signs to indicate neighborhood groupings.

Arrange for copies of the cartoon booklet "Man Meets Coast" if it is to be used for background material.

Distributing Handout Materials

In a school situation it is recommended that the players be presented with background material a day or more in advance in order to acquaint themselves with the setting and situation. These materials include:

Map of Big Bay County
Big Bay Gazette Newspaper
"Man Meets Coast" Cartoon booklet (if used)

If the teacher or game coordinator desires, game identities of the players may also be assigned in advance. Some teachers have suggested that students come dressed as their assigned character. In a situation where it is not feasible to distribute the materials earlier, additional time should be programmed before the actual playing of the game to give the players time to become familiar with the situation and setting.

Grouping of participants

The teacher or game coordinator will determine in advance the probable number of participants and number of groups to be involved. An odd number of groups produces the proper composition for the final commission meeting. Each group should consist of 6 to 12 participants. If classes are small, the teacher or coordinator may want to consider combining two classes as suggested earlier. Fifty to 70 players is considered ideal.

Select name tags from the game book which lists the group number appropriate for the game. For example, tags with numbers one through seven will be used if there will be seven groups. If there are three groups, select name tag numbers 1, 2, and 3.

Selecting problems to be considered

From the list of coastal situations select those to be considered by the players during the game. Usually two or three problems can present an array of typical situations found along the coast. The number used depends upon the time available, however, it is best if more than one problem is considered. This provides for a broader range of participation since each situation has a different level of involvement. Allow at least 15 to 20 minutes for discussion of each problem before the County Commission.

Preparing the room where the game is played

The game may be carried out in a classroom or meeting room with moveable chairs or desks. If arrangements can be made to use an actual city council or county commission chambers it would lend authenticity to the game. Following is a model for arrangement of facilities for playing the game. These suggestions can be modified to conform to the facilities available.

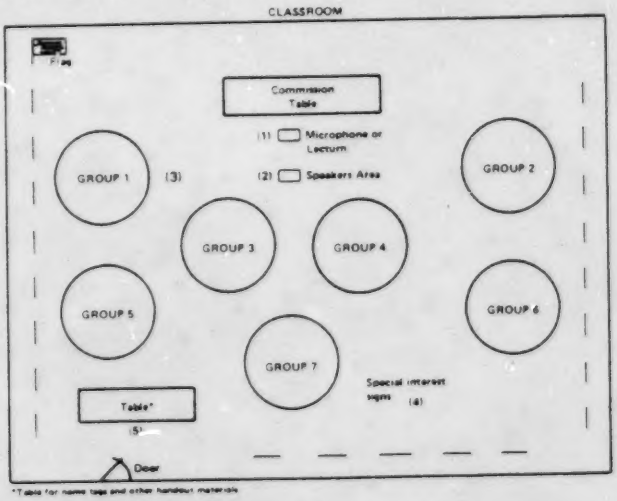


*Table for name tags and other handout materials

The county commission will sit at a table near the front of the room. A microphone or lectern is useful for large groups. Place a copy of the Oath of Office and a guide for parliamentary procedure at each place.

Tables for the group meetings should be large enough to accommodate the number of players assigned to each group. Handout materials for the neighborhood meetings should be placed on the table. Each table should have a group number on it so that the players can easily find their places.

If name tags and other player handout materials have not been handed out previously, they can be placed on a table near the entrance to the room where the identity of players is randomly selected when they enter the room.

Special interest group signs are posted on the wall around the room so the players will know where to assemble for their caucus and lobbying meetings. Character profiles can be posted with the appropriate sign if they have not been provided previously.

Selecting a chairman

A good chairman is essential. If arrangements can be made to have an elected official serve as Chairman of the Big Bay County Commission, it would insure that the commission meeting is conducted properly and would provide an expert to rule on prodedural questions as they arise. If this is not possible, the teacher or coordinator or someone else experienced in the rules of order may conduct the meeting. The teacher may wish to obtain a copy of Robert's Rules of Order from the school or public library. If the teacher or coordinator prefers, one of the players may fill this position with the chairman chosen by vote of the Big Bay Commission elected during the game.

The teacher should brief the commission before the hearing on procedures and protocal to follow. Questions to ask the "citizens" might be suggested to stimulate thought.

Timing the program

When preparing the agenda, it will be necessary to plan approximately how much time should be given to each aspect of the game. Following are suggested times for various game sequences. If necessary, steps 1-5 can take place in one class period and steps 6 and 7 in the next.

Sequence	Purpose	Approx. Time
1. Arrival	Distribution of name tags	5 minutes
2. Introduction	Explain purpose	5 minutes
3. Big Bay County	Familiarize participants	15 minutes
4. Neighborhood Meeting	To discuss the opinions and outlook of each participant on each problem to be considered	15-20 minutes
5. Caucus/Lobby	Plan strategy for convincing the County Commission to decide the issue in favor of each special interest group	8-10 minutes
6. Big Bay County Commission	Final decision will be made on each issue by the elected commissioners representing each neighborhood group	15-20 minutes/ issue (1 hour for 3 issues)
7. Conclusion	Assessment of conclusion and comparison to the decision in each example in the actual case. Issues used are based upon real world situations.	3-5 minutes
		80-120 minutes

Playing the game

When the participants have received their identities and are seated in place at their neighborhood groupings, the coordinator is ready to proceed with the game. A suggested game scenario for use by the coordinator is attached as Appendix A.

APPENDIX A

GAME SCENARIO

GAME SCENARIO

GETTING TO KNOW BIG BAY COUNTY

Welcome to Big Bay County, your new home for the next hour and a half or two hours. You have just been given a name tag with a new name for you. The name tag shows who you represent in Big Bay County. You have a new place to live, a new job, new friends and a new way of viewing the world around you.

You have previously been given a map of Big Bay County to familiarize yourself with the area and also a copy of the Big Bay Gazette with news about what is happening that may affect you in your new identity.

You have also received the Schedule of Events in Big Bay County today and copies of information about the various meetings which you will be attending.

But first, we are going to take a few minutes to go over the map together so that you can familiarize yourselves again with the place where you live and work.

Look at your map now and try to memorize where the various buildings and areas are so that you will know even without looking back at the map.

At the top of the map you can see the ocean and the ship channel leading into the bay. Notice, too, the barrier island and the mangroves and grass beds in the estuary. You can see that there is a bridge connecting the mainland with the barrier island.

Also at the top of the map you will see the beach. Find Lighthouse Point which marks the entrance to the ship channel and notice that there are a number of vacation villas built at Lighthouse Point. Proceed further down the road and you will see the Convention Motel and the Milton Hotel.

On the bay side of the barrier island you should be able to find Marilyn Mooring's marina. Did you find it? Since it is on the bay side of the island, it is in protected waters.

Look at the estuary again. Water in the Big Bay estuary is brackish, a mixture of sea water pushed by tides through the ship channel and fresh water that runs off from the land. The bay is shallow, with grassbeds lining much of the sunlit bottom. Fishermen make some of their best catches on these grass flats. Barges, sailboats, cruisers, and fishing boats use the navigation channel maintained down the center of the bay.

Are you with me so far? All right, then let's go back across the bridge onto the mainland. To our right as we come onto the mainland, is a housing development, Bayview Shores. Notice how most of the houses border the waterfront on canals. New residents, many of whom first came to Big Bay County as tourists, are delighted with the fine climate of the area and enjoy the beaches, boating, gardening, and other outdoor activities.

To our left as the road turns we see Harvest Farms. That farm and other farms and ranches have been operating in the county since 1890. The farms produce citrus fruits, oranges, and grapefruit. Ira Gates and Peter Plows produce winter vegetables. Prize cattle are regular winners at the annual State Fair.

Just beyond Harvest Farms and to our left as we continue down the road we see the Petrol Products plant and beyond that the Pits Gravel Company. We pass the road that leads to a proposed marina site and then up ahead we see the masts and smoke stacks of Port Florida, home of the county's famous shrimp fleet. There are marinas for small boats, and docks for vessels carrying fuel, oil, citrus, and phosphate ore. Bertha Ship and Beacon Light, members of the Port Authority make decisions on how the docks, channels, and wharfs will be operated, maintained and expanded. Tourists like Sunny Hours and Tony Tours arrive in Big Bay via cruise ships. Shippers rely on the safe harbor and well maintained port facilities. Onassis Jones and Super Tanker often direct their ships into Port Florida.

Finally, we end our look at Big Bay County by noting the location of the Oz Power and Light Company across the road from the port. That is the source of power for your community.

Are there any questions? Do you all understand the type of community you have in Big Bay County? (ALLOW A FEW MINUTES HERE, IF NECESSARY, TO ANSWER ANY QUESTIONS PARTICIPANTS MAY HAVE).

All right, we will now take a few minutes to examine some of the issues that are facing our community. The Big Bay Gazette, which you have already had an opportunity to read, reported on these issues. These are problems to which you are going to try to find solutions. As we talk about these issues, think about how you, in your new identity, feel about them and what solutions you could offer. Please have your maps in front of you so that you can follow along as I review each problem. You all have copies of these agenda items, to be considered by the County Commission so that you can refer to them again later on in your neighborhood and caucus meetings.

(COORDINATOR AT THIS POINT REVIEWS THE PROBLEMS TO BE CONSIDERED BEING SURE THAT THE PARTICIPANTS UNDERSTAND AND CAN LOCATE THE SOURCE OF THE PROBLEMS ON THE MAP).

NEIGHBORHOOD MEETING

We're now ready to begin the neighborhood meetings. This is your opportunity to become acquainted with your neighbors and what they do and how they feel. Read over the sheet about the Neighborhood Meeting and then begin to discuss among yourselves how to solve the problem from the perspective of the "new" person on your name tag.

(COORDINATOR: ALLOW APPROXIMATELY 15 MINUTES FOR NEIGHBORHOOD DISCUSSION AND THEN HAVE THEM HOLD ELECTIONS TO SELECT ONE OF THEIR NUMBER TO THE COUNTY COMMISSION. THE PARTICIPANTS ELIGIBLE TO RUN FOR OFFICE HAVE A SEASHELL ON THEIR NAME TAGS. THE ELECTION SHOULD TAKE NO LONGER THAN 5 MINUTES).

CAUCUS LOBBY MEETING

We're now ready to proceed to the caucus meetings which are designated by signs on the wall. Proceed to the place where your special interest group is meeting. Read the information you have about the caucus meeting. Then read the character profile sheet which has been provided at each meeting place. This explains in more detail what you as a group do and what you do in your new identity. This will also help you know the other members of your group and to reach decisions about what to do about the issues affecting you.

(COORDINATOR: ALLOW APPROXIMATELY 10 MINUTES FOR THE GROUPS TO DISCUSS AND REACH A CONSENSUS ON THE ISSUES. DURING THIS TIME YOU CAN EXPECT OR EVEN ENCOURAGE LOBBYING EFFORTS BY INTEREST GROUPS TO INFLUENCE THE THINKING OF ELECTED OFFICIALS. BE PREPARED, HOWEVER, TO DETECT TECHNIQUES GENERALLY CONSIDERED UNETHICAL OR ILLEGAL, E.G. SIMULATED BRIBES OR BLACKMAIL. DO NOT ENCOURAGE SUCH TECHNIQUES, BUT IF THEY ARISE TURN THEM INTO A POSITIVE EDUCATIONAL EXAMPLE BY POINTING OUT THEIR CONSEQUENCES, E.G. REMOVAL FROM OFFICE, CRIMINAL PROSECUTION, RUINED CAREERS, EVEN JAIL.)

COUNTY COMMISSION MEETING

You have now had an opportunity to discuss the issues with those who feel as you do, and if desired, to select one or more of your group to speak to the County Commission. We will now assemble for the meeting of the County Commission. Those who have been elected to the commission will take their places behind the table here. Please refer to the handout concerning the commission meeting. It explains how you should address the commission.

(COORDINATOR: ALLOW A FEW MINUTES FOR THE PARTICIPANTS TO REASSEMBLE FOR THE MEETING. IF ACTING AS CHAIRMAN OF THE COMMISSION, CALL THE MEETING TO ORDER, OR, IF NOT, INSTRUCT THE PERSON ACTING AS CHAIRMAN TO DO SO. COMMISSION MEMBERS ARE THEN SWORN IN. THE OATH OF OFFICE SHOULD HAVE BEEN PLACED ON THE TABLE BEFORE THE START OF THE GAME SO AS TO BE ACCESSIBLE AT THIS TIME. THERE IS NO OLD BUSINESS TO CONSIDER, SO THE COMMISSION IS READY TO CONSIDER NEW BUSINESS, NAMELY THE AGENDA ITEMS AS LISTED AND AS PREVIOUSLY DISCUSSED IN THE NEIGHBORHOOD AND CAUCUS MEETINGS).

From this point on, the Game proceeds along the lines of a regular commission meeting with members of the commission discussing the issue, offering their views, hearing from the others in attendance

at the meeting if they wish to speak to the issue and finally voting on each issue. If a student participant is acting as chairman of the commission, the coordinator should stand by ready to assist when problems of procedure arise. This part of the game continues until the issues have been discussed and voted on-usually about an hour if there are three issues. The meeting is then adjourned.

CONCLUSION

At this point, the teacher/coordinator may want to take 5 or 10 minutes to reinforce the lessons learned during the playing of the game. If there has been a recent actual situation closely parallel to one of the game problems, it might be constructive to compare the outcome of the actual situation with that reached in the game.

Before the teacher dismisses the class, it may be desired that all materials be left in the room for use in future games. This is entirely up to the teacher, of course.

APPENDIX B

HANDOUT MATERIAL
(one to each player)

Big Bay County map

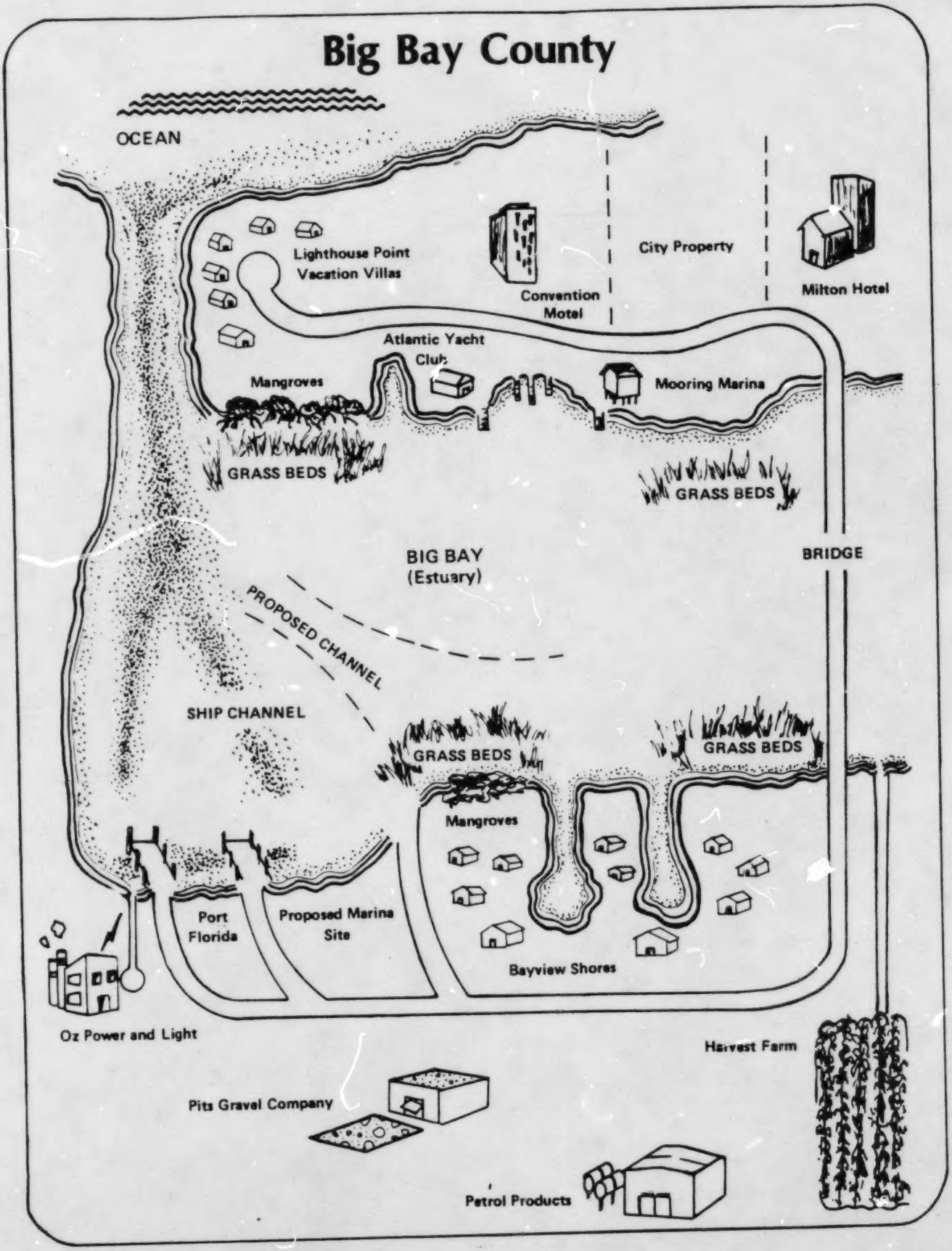
Big Bay Gazette newspaper

Player's Guide and Information on Meetings

Agenda items

Oath of Office (one copy for each County Commissioner)

Big Bay County



Big Bay Gazette

TODAY'S NEWS
ANYDAY

FREE TO RESIDENTS OF
BIG BAY

NET FISHING BAN

Homeowners in Bayview Shores, represented by Vista McGrass, will appear before the Big Bay County Commission today. McGrass will present a resolution supporting a ban of commercial fishing in waterfront canals near homes. Sports fishermen, Big Trophy and Rod Caster will agree. Mr. Trophy says, "those commercial fishermen take all the fish from our canals."

"During cold weather, schools of fish have been moving into the canals near Bayview Shores," explained Crabtrap Sinker, well known commercial fisherman. He says "fishermen have to follow the fish in order to supply local restaurants like Sam Clam's Seafood and the Milton Hotel. We have to make a living. Big Bay depends on our catch."

Homeowners Patty Sandcastle and Dune Huhn complain that fishermen disturb the neighborhood with noise and lights late at night. Josie Taxpayer told Big Bay Gazette, "I'm afraid at night. Thieves posing as fishermen could come undetected through our neighborhood."

Ernie Outboard added, "I don't want to get my boatmotor caught in those fishing nets fishermen spread across the canal."

MEETING OF PORT FLORIDA PORT AUTHORITY CALLED

A special meeting of the Port Florida Port Authority has been called by board member Bertha Ship. Beacon Light of the Authority will discuss how much money the port will lose if the port is closed because of the turtle ban.

PLAN PROPOSED TO BAN DREDGING OF CHANNEL

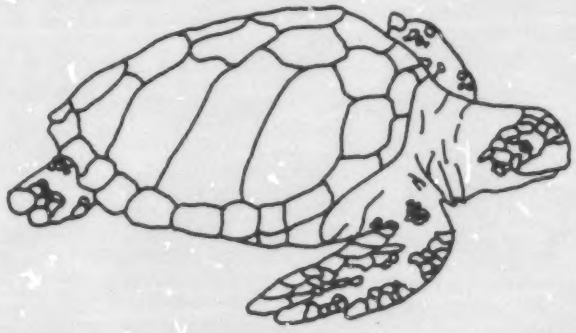
A proposed plan to ban dredging the channel of Port Florida has brought an outcry from many residents of Big Bay County, says Peter Petrol of Petrol Products. Shipper Super Tanker could not deliver fuel oil to Oz Power and Light during cold winter weather if ship channels could not be dredged because of the turtles. Flash McLight of Oz Power warned homeowners to expect power cutbacks next winter. Porter Speedwell says phosphate ore could not be taken through the port. Maxine Merchant says citrus from Perry Crop's grove would rot on the dock.

Commercial fishermen and shrimpers are also concerned. The port entrance is usually prime shrimping grounds. Nettie Flounder representing the commercial fishermen said in a recent interview that the ban would mean that shrimpers could no longer make a living in Big Bay.

WILDLIFE AGENCY STUDYING PORT'S TURTLE ATTRACTION

The "Save the Fish and Flower Preservation Society" president, Daisy Wildflower, is asking the county commissioners to recommend that the channel leading to Port Florida be made a critical habitat for endangered Ridley and Loggerhead turtles. During cold winter weather the turtles hibernate in the channel bank according to Peter Parks, park ranger. Nothing should be done in the harbor to disturb the turtles.

Tourist Mary Goodtime says she comes every summer to see turtles hatch near the Lighthouse Point Villas owned by local developer Mason Mansion. Conservationists and tourist industry representatives favor the resolution and a dredging ban during winter months. Homeowners are asking if the channels are dredged where would the dirt and fill be stacked. "We don't want piles of spoil blocking our lovely waterfront view," said Muddy Waters hearing of the proposed dredging.



WHO NEEDS WATER?

A controversy is facing Big Bay County. Water is necessary for life. It is also important to many industries.

"Homeowners need water to drink, wash, and water lawns," explains Wendy Shore. We also need to air condition our homes and using well water for cooling is not the most economical. Those farmers use too much water themselves. They put it on the fields, then pump polluted water into canals and drain into Big Bay. The water carries fertilizers and pesticides which cause algae blooms and fish kills." According to Crabtrap Sinker all that fresh water from the houses and the farms is changing the Bay. He says clam and oysterbeds are suffering.

Philomena Phoster, manager of Phos-phates Inc. claims the county needs more jobs. "We use water but we put people to work," he says.

BEACH FOR SALE?

Big Bay County officials are being offered $10,000,000 for the County-owned beach front property. Pearl B. Progress, of Development Incorporated, is offering to buy the land on the barrier island in order to build Holiday Camper Inn. Progress will give details of the offer at the County Commission meeting today.

The one-half mile of public beach, covered by dune vegetation, was given to the county from the estate of the late John P. Moneybags. "The undeveloped land," says Daisy Wildflower of the Save the Fish and Flower Preservation Society, is the only portion of the barrier island not covered by hotels, restaurants or homes. It should be kept as nature intended.

Newton Good, Chamber of Commerce president, points out that the county government does not have the money to develop a park on the site or even to keep trash picked up. The dunes are crossed by foot paths and dune buggy trails. Tourists and parents like Wendy Shore worry that there are no lifeguards on duty to protect swimmers.

The plans for Holiday Camper Inn call for camper sites to be built behind the dune. One thousand feet of beach front would be reserved for public use at a charge of $.25 per day. Proceeds would be used for beach clean-up and lifeguard protection according to Pearl Progress.

Vinnie Vacancy, President of the Hotel and Motel Association, says campers have no place in an exclusive beach tourist area like Big Bay Beach.

GROWTH DESTROYS COMMERCIAL FISHING

Valuable fishing grounds are beginning to be converted to waterfront homesites according to Barge Oysterman. Grassflats and shallows have been dredged to fill low land for residential development. Pollution from the land means fewer fish to catch. Pearl B. Progress says development must continue to meet the need for new houses.

The Bayview Shores area was once a good fishing ground. Now it is only fished during cold weather when fish move in from the Bay. Nettie Flounder told the Gazette that the water belongs to everyone. "We used to fish everywhere in the Bay but now there are fewer fish. We have to work harder to find them."

NEW MARINA PLANNED

The Safe T. Harbour Marina may be built near Port Florida. When contacted yesterday, Safe T. Harbour of the Marine-Company said he will appear before the County Commission today to request a zoning change on his property from residential to commercial/marina category.

Barney Boatman, an avid pleasure boater, Anita Anglers, and Shrimp Trapper agree that more dock space is needed for boats in Big Bay. Boatman says, "Marinas have to be near the water, houses don't." Shrimp Trapper needs mooring near the harbor in protected waters. "You'll have to dig out a new channel, too. It's too shallow for boats on those grassflats," he said.

Homeowners next door to the marina say the site will detract from the value of their property. "And where are they going to stack the sand they take out of the bay, in my backyard?" asked Vista McGrass.

Joanie Seagull of the Save the Fish and Flower Preservation Society will remind the Commission of the environmental costs of the proposed marina. Grass beds will be destroyed and mangroves removed. "Do we know how this project will affect the bay and the production of fish, clams, and shrimp?" she asked.

WATER WELL RULES PROPOSED

The Big Bay farmers cooperative will appear before the County Commission today. Ira Gates, spokesman for the group, will ask for an ordinance to restrict the use of well water for air conditioners. The Commission will be asked to either pass a resolution banning the use of wells for air conditioners or require that new wells have valves which turn off the water when not used.

Farmers in Big Bay raise fine fruits, vegetables and cattle. According to Goldie Harvest, crops are irrigated with water from the sparkling aquifer.

"Lately there is less water in the well system, there's no pressure and I'm getting salt water when I pump," explains Peter Plows.

Sam Fields told the Gazette, "Those people in Bayview Shores, the Port and the Phosphate Company use too much water. They waste the water we need to produce food for this county."

FISHING CONTROL SNARLED

Snooker McGee and Merry Skiff of the Bayview Shores small boat club met with Mattie Scallop of the commercial fishermen to discuss solutions to the fishing problem. McGee said fishermen mark their boats for identification. They offered restricted fishing between midnight and five o'clock in the morning. Sport fishermen want legislation to prohibit further devastation of sport fishing.

PLAYER'S GUIDE

"Man Meets Coast" is a game in which you assume the identity of a resident of Big Bay County. Your role is to think and act as someone who represents this point of view. Ultimately you'll attend a mock county commission meeting where different important issues affecting the use of Big Bay coastal resources will be decided. Before that you'll meet your neighbors at a neighborhood meeting then you'll meet with others sharing common interests to agree on a way to influence the decisions made by the county commission. The information on this page explains the various meetings you will be attending.

NEIGHBORHOOD MEETING

The purpose of this meeting is to:

1. Get to know each other in your new personalities.
2. Discuss your points of view on each of the problems now facing your town.
3. Each person should be encouraged to express his view at some time during the discussion. You may feel strongly about one problem or not involved in another. Try to imagine how the person you are playing would feel in each case.

LOBBY/CAUCUS MEETING

This is a meeting of all those people who have a similar point of view regarding the questions you face today. A lobbyist is a person who tries to get elected officials to vote for measures favorable to his special interest.

A meeting to decide what to do about a certain problem can be called a caucus. During the next 10 minutes discuss each of the problems and how it affects those in the group. You may feel more strongly about some questions than others.

The purposes of this meeting are to:

1) decide what your group thinks about each problem
2) decide what should be done to solve the problem
3) decide how to convince the county commission to do what you think is best
4) decide who or how many of your group will speak before the County Commission.

Some groups have been placed on the agenda of the Commission Meeting. Those on the agenda have a special note. Anyone may speak during the commission meeting when recognized by the Chairman of the County Commission.

BIG BAY COUNTY COMMISSION MEETING

This is the meeting of the people you have elected to solve the coastal problems facing your home. They will make decisions which will determine what will happen.

You or someone representing your group may try to convince the commission to do what you think is best. To speak to the commission:

1. Look at the meeting agenda on the handout sheet. Find those subjects which are of interest to you.
2. Think about what you want to say.
   a. address the commission
   b. introduce yourself, say where you live
   c. who you represent
   d. tell the commission what you want them to do
   e. explain why you want them to do what you recommend

How To Talk To The Commission

Ladies and Gentlemen of the Commission, my name is . I live in Big Bay County and represent . I would like you to (accept/deny) the request.

I am asking you to do this because:

1.
2.
3.

For these reasons I hope you will act on my behalf in this matter. Thank you.

AGENDA - ITEM A

COMMERCIAL FISHING BAN REQUESTED

Recently schools of fish have moved into canals along the Big Bay estuary. Commercial fishermen have been setting their nets in the canals in order to catch the fish. They say they must follow the fish in order to make a living. They feel that dredge and fill projects and pollution from developed areas have caused a decrease in the number of fish in other fishing areas. In the past, before residential development, these canals were a part of regular commercial fishing grounds.

However, homeowners complain that fishermen distrub the neighborhood with lights and noise late at night. Residents are afraid of thieves posing as fishermen. Sport fishermen complain that commercial fishermen take all the fish out of canals, leaving none for recreation fishing or small boaters.

Homeowners from Bayview Shores and representatives of the Fish for Fun Club are asking the County Commission to pass a resolution supporting a proposed state law banning commercial fishing in canals.

AGENDA - ITEM B

WATER WELL RULES PROPOSED

Harvest Farms are growers of the finest fruits and vegetables in Bay County. They irrigate their crops with water from wells tapping the sparkling aquifer. The water from the wells is flowing with less and less pressure and may be more salty than in the past. Other local farms are having similar problems. Farmers say that over use of wells supplying Bayview Shores, the port and Pits Gravel are causing the decrease in pressure and poor water quality.

Homeowners use well water for drinking, washing, and watering lawns as well as for air conditioning. Most air conditioning wells free flow day and night. Homeowners say farms use too much water and pollute the Bay by directing water off the fields into the bay. Fertilizers and pesticides cause algae blooms and fish kills according to the Fish for Fun Club and Fish and Flower Preservation Society. Fishermen say that too much fresh water is mixing with salty water of the Bay changing the clam and oyster beds.

Shippers need water to supply ships' water tanks. Pits Gravel uses water in its mining operation. Local farmers are asking the County Commission to pass a law requiring that water no longer be used for air conditioning, or that new wells have a special valve which will turn off the water when the air conditioner is not being used. This, they feel, would save water and increase the pressure in wells.

AGENDA - ITEM C

AGENCY WANTS CRITICAL WILDLIFE HABITAT FOR TURTLES

The Save the Fish and Flower Society is asking the County Commission to recommend the dredged channel leading to Port Florida be listed as a critical wildlife habitat for the endangered Loggerhead and Ridley Turtles. The turtles hibernate in the sand of the channel bank during the winter. If the port is a critical habitat, then the ship channel cannot be dredged during the winter months.

Representatives of the Port say that the channel will fill with sand during winter storms. Ships carrying fuel oil, citrus products, and phosphate ore could not enter or leave the port. Commercial shrimpers say they would not be able to trawl near the port, usually their best shrimping area. Representatives of Petrol Products are afraid their tankers could not enter an undredged channel to deliver fuel oil to Oz Power and Light Company. Homeowners would then have reduced electrical power.

Each year many tourists stay at beachside motels. They come to see the mother turtles lay eggs and watch the hatch, then return to the sea. Motel owners need the tourist business.

AGENDA - ITEM D

SALE OF BEACH REQUESTED

One-half mile of beach with dune vegetation is owned by Big Bay County on the barrier island, but the county cannot afford to develop the property as a park or preserve. Consequently, the dunes are being damaged by foot traffic and off-the-road vehicles for lack of controlled access and routine maintenance. Users of the public beach also risk injury from uncollected trash and unsupervised swimming.

At the County Commission meeting representatives of Development, Inc. will offer to purchase the beach front property for use as a private campgrounds. The Save the Fish and Flower Preservation Society contends the property should remain natural, while the Hotel and Motel Association claim that a campgrounds would detract from the beach's tourist appeal.

AGENDA - ITEM E

REZONING FOR MARINE DEVELOPMENT REQUESTED

Safe T. Harbour, or his representative, will request that his property on the south shore of Big Bay be rezoned from a residential to a commercial/marina category. Local boaters support the change, citing the need for more docking facilities. Homeowners in the adjacent Bayview Shores are concerned about a possible decline in property values if the development is unaesthetic. However, they also recognize possible benefits to a well constructed and managed private marina nearby.

The Save the Fish and Flower Preservation Society is likely to oppose the zoning change because of the extensive dredging necessary to maintain channels and basins in these shallow waters. Such activity could destroy surrounding grassbeds and mangroves, or cause a decline in local fish and shellfish populations.

OATH OF OFFICE

"I, ,do solemnly swear (or affirm) that I will support, protect and defend the Constitution and government of the United States of America and of the State of Florida against all enemies, domestic or foreign, and that I will bear true faith, loyalty and allegiance to the same, and that I am entitled to hold office under the Constitution, that I will faithfully perform all the duties of the office of County Commissioner of the County of Big Bay of which I am about to enter. So help me God."

APPENDIX C

MASTER LIST OF NAMES

CHARACTER PROFILES

NAME TAGS

List of Coastal Interest Groups and Identities for Coastal Awareness Game

SAVE THE FISH AND FLOWER PRESERVATION SOCIETY
- Penny Preservation
- Winnie Wilderness
- Otto Bonn
- Joanie L. Seagull
- Daisy Wildflower
- Pete Parks

MOTEL OWNERS
- Konred Milton
- Nickie Neon
- Connie Vention
- Lotza Room
- Michele Manager
- Vinnie Vacancy

SMALL BOAT OWNERS
- Commodore Sales
- Merry Skiff
- Barney Boatman
- Ernie Outboard
- Sandy Skier
- Fisher Sesson

PETROL PRODUCTS
- Pete Petrol
- Tex Wells
- Derek Offshore
- Pat Pipeline
- Olive Oil
- Drill Deeper

FARMERS
- Goldie Harvest
- I. M. Farmer
- Sam Fields
- Ira Gates
- Perry Crops
- Peter Plows

TOURIST
- Sally Suntan
- Chicago Bound
- Sunny Hours
- Ginny Snowbird
- Toni Tours
- Mary Goodtime

BAYVIEW SHORES HOMEOWNER
- Vista McGrass
- Patty Sandcastle
- Dune Huhn
- Josie Taxpayer
- Wendy Shore
- Muddy Waters

MINING
- Henrietta Pits
- Philomena Phoster
- Sandy Gravel
- Shelly Button
- Strip Mining
- Rocky Boulder

SEAFOOD RESTAURANT OWNERS
- Clem Chowder
- Stew Mulligan
- Sam Clam
- Pinkie Shrimp
- Maye Fry
- Cookie Sweet

SHIPPERS
- Onassis Jones
- Super Tanker
- Tammy Titonic
- Porter Speedwell
- Sally Seaman
- Maxine Merchant

GZ POWER AND LIGHT
- Polly Power
- Kelly Kilowat
- Flash McLight
- Jean O. Rater
- R. E. Actor
- Cool E. Tower

PORT AUTHORITY
- Beacon Light
- Bertha Ship

MARINA OPERATORS
- Dock Holiday
- Terry Tackleshop
- Boatwright Bait
- Safe T. Harbour
- Marilyn Mooring
- Bouy Light

COMMERCIAL FISHERMEN
- John Ketchum
- Nettie Flounder
- Barge Oysterman
- "Shrimp" Trapper
- Mattie Scallop
- Crabtrap Sinker

SPORTS FISHERMAN
- Anita Anglers
- Snooker McGee
- Bing Trophy
- Skip Fisher
- Brook Trout
- Rod Caster

DEVELOPERS
- Jim Holmes
- Mason Mansion
- Pearl B. Progress
- Manny Acres
- Newton Good
- Sally Goodstores

PETROL PRODUCTS

Your job:

to drill for oil from oil rigs offshore in the ocean

to refine the crude oil

to sell fuel oil to Oz Power and Light which will be used to run electrical power generators and keep homes warm in winter

to produce gasoline which is stored at Port Florida to run cars, trucks, boats and tractors

Get to know your friends:

Pete Petrol owns the oil company Petrol Products.

Tex Wells is an expert on offshore oil production. He ships oil to Port Florida.

Derek Offshore builds offshore oil rigs and ships his material from Port Florida.

Olive Oil is the Vice President of the Petrol Products division which ships oil to Port Florida.

Pete Pipeline is building an oil pipeline from Port Florida to Oz Power & Light.

Drill Deeper is the geologist for Petrol Products. He tells Pete Petrol where to drill for oil.

MINING

Your job:

to take phosphate ore from the ground. The ore is used for fertilizer for the farms, groves and ranches as well as lawns and gardens

to mine sand and gravel and rock for the construction of roads, streets, houses, stores and motels

Get to know your friends:

Henrietta Pitts owns Pits Gravel Company which sells gravel to Jim Holmes Construction Company.

Philomena Phoster owns Phos-Phate Incorporated which mines phosphate ore.

Sandy Gravel owns Rocks to You Company which sells building materials to developers, homeowners and the port.

Shelley Button works for Sandy Gravel.

Strip Mining works for Philomena Phoster at the phosphate mine.

Rocky Boulder drives a dump truck for Pits Gravel Co.

OZ POWER & LIGHT

Your job:

to produce electrical power for the farms, houses, motels and businesses of Big Bay

Get to know your friends:

Polly Powers buys fuel oil from Petrol Porducts to make electricity.

Kelly Kilowatt is the engineer in charge of running the Oz Power generators.

Flash McLight works for Oz Power and Light planning for power lines in Big Bay.

Jean O. Rater works for Polly Powers.

R. E. Actor is in charge of oil storage for Oz Power.

Cool E. Tower works for Kelly Kilowatt.

MARINA OPERATORS

Your job:

to build and take care of and rent docks and piers for boats belonging to commercial fishermen and homeowners

to rent boats to tourists

to sell bait, fishing tackle and gasoline to boat owners

to repair broken boats

Get to know your friends:

Dock Holiday is the dock master at the Atlantic Yacht Club.

Terry Tackleshop owns the shop which sells bait and fishing gear at Port Florida.

Safe T. Habour wants to build a new marina between the port and Bayview Shores.

Boatwright Bait sells live bait to sport fishermen who fish off the Big Bay Bridge.

Marilyn Mooring owns and operates the Mooring Marina near the Convention Motel.

Bouy Light outfits the commercial fishing boats at Port Florida.

PORT AUTHORITY

Your job:

to manage Port Florida

to see that boats can come in from sea, unload one cargo, put up another cargo and go back to sea

make decisions on how to build and maintain docks and channels

Get to know your friends:

Beacon Light is the President of Port Florida.

Bertha Ship is the Vice President of Port Florida.

SHIPPERS

Your job:

to carry passengers on cruise ships to Big Bay

to carry cargos of heavy equipment and oil into Port Florida

to carry citrus fruits, phosphate ore and processed fish products out of Big Bay to markets far away

Get to know your friends:

Onassis Jones owns a fleet of ships carrying heavy equipment, tractors and mining equipment.

Super Tanker owns big ships carrying fuel oil to Big Bay.

Tammy Titonic is Captain of a cruise ship bringing tourists to Big Bay.

Sally Seamans's ship carries cargos of citrus fruits.

Maxine Merchant's ships carry cargo into and out of Big Bay.

SPORTS FISHERMEN

Your job:

to enjoy the pleasure of catching fish from Big Bay

to spend your free time on fishing trips to the ocean in your own boat or one rented from one of the marinas

to harvest clams, crabs and oysters for your family who live in Bayview Shores

Get to know your friends:

Anita Anglers likes to fish in the canals at Bayview Shores.

Snooker McGee fishes for snook on the jetties near the inlet to Port Florida. He is President of the Fish for Fun Club.

Bing Trophy goes fishing for marlin and sword fishing in a boat rented from Mooring Marina.

Skip Fisher enjoys fishing and shrimping from the Big Bay Bridge.

Brook Trout fishes Big Bay from a boat he docks at the Atlantic Yacht Club.

Rod Caster fishes from his dock on the canals of Bayview Shores or in the grassflats.

COMMERCIAL FISHERMEN

Your job:

to catch fish in the ocean

to catch fish in Big Bay

to seed and harvest oysters in Big Bay

to catch crabs in crabtraps and harvest crabs

sell seafood to hotels, restaurants and homeowners

Get to know your friends:

John Ketchum owns the trawler Big Catch which fishes the ocean from Port Florida.

Nettie Flounder is captain of the fishing boat.

Barge Oysterman has an oyster bed in Big Bay.

"Shrimp" Trapper owns and is captain of a shrimp boat Big Pink which sails from Port Florida.

Mattie Scallop is the first mate on a fishing boat which sails from Port Florida.

Crabtrap Sinker harvests crabs from traps along the shore of Big Bay.

SMALL BOAT OWNERS

Your job:

you spend your free time using your boat in the canals, port and channels of Big Bay

you like to go fishing, swimming and water skiing

Get to know your friends:

Commodore Sales is the President of the Atlantic Yacht Club. The club has a famous dining room, docks, and marina for its members.

Merry Skiff enjoys morning rides in her ten foot long sailing dingy.

Barney Boatman and his friends go sailing in Big Bay every weekend.

Ernie Outboard enjoys fishing trips in the boat he keeps moored behind his house in Riverview Shores.

Sandy Skier enjoys water skiing and often is hired to teach tourists how to ski.

Fisher Sessions uses a row boat to fish the grassflats near Bayview Shores.

SEAFOOD RESTAURANT OWNERS

Your job:

to buy fish, shrimp, and scallops from fishermen and shrimpers of the Port Florida fleet who fish offshore in the ocean

to buy fish, clams, crabs, and oysters from the commercial fishermen who fish in Big Bay

to serve the tourists who come to Big Bay. They spend their money in the county making tourism an important part of the Big Bay economy

to dock your ships at Port Florida and protected marinas

Get to know your friends:

Clem Chowder is the owner of Clem's Chowder Bar near the Big Bay Bridge.

Stew Mulligan is the owner of the Stew Pot, a lunch room near the port.

Sam Clam operates the restaurant in Milton Conrad's Hotel.

Pinkie Shrimp is the owner of the dining room at the Lighthouse Point Resort.

Maye Fry is the seafood cook at the Stew Pot.

Cookie Sweet is the seafood cook at the Lighthouse Point Resort.

FARMERS

Your job:

to raise food for sale outside of Big Bay; you ship your crops from Port Florida

to raise food for the people of Big Bay; fruit, vegetables, meat and grain

Get to know your friends:

Goldie Harvest owns, harvests, farms, and raises fresh vegetables for the homeowners and restaurants in Big Bay.

I. M. Farmer grows citrus fruits for the people of Big Bay and ships the rest to other markets through Port Florida.

Sam Fields raises prize winning beef cattle near Big Bay.

Ira Gates raises winter vegetables, tomatoes, squash, cucumbers and green peppers.

Peter Plows works as farm manager for Ira Gates.

Perry Crops has a beautiful citrus grove near Big Bay.

MOTEL OWNERS

Your job:

to see that tourist and visitors to Big Bay County have a comfortable place to stay, good food to eat, and entertaining things to do

Get to know your friends:

Konred Milton owns and operates the Milton Hotel.

Nickie Neon manages the Neon Motel for the owner who lives out of town.

Connie Vention is in charge of convention of clubs and organizations which come from around the world for meetings in Big Bay County.

Lotza Room is the manager of the Lighthouse Point Villas owned by Mason Mansion.

Comfort Placemaker owns and operates the Fisherman's Post Resort.

Vinnie Vacancy works for the Weeks Inn Motel chain which owns a motel near Big Bay. Vinnie is President of the Big Bay Hotel and Motel Association.

DEVELOPER

Your job:

to build homes, stores, hotels and businesses for all the people of Big Bay

to promote more business and encourage more people to visit and buy homes here

Meet your friends:

Jim Holmes built the first houses in Bayview Shores for Vista McGrass and Josie Taxpayer.

Mason Mansion built the Lighthouse Point Vacation Villas and still owns part of Lighthouse Point.

Pearl B. Progress of Development Incorporated is planning to build a campground on the beach called Holiday Camper Inn.

Manny Acres works with Jim Holmes in building and selling homes in Bayview Shores.

Newton Good, President of Chamber of Commerce, would like to build waterfront condominiums near the Atlantic Yacht Club.

Sally Goodstores has built homes in Bayview Shores and would like to build a shopping center on the causeway.

SAVE THE FISH AND FLOWERS PRESERVATION SOCIETY

Your job:

to keep the natural resources of Big Bay for the future

to protect wildlife and keep the water of Big Bay clean enough for swimming

Get to know your friends:

Penny Preservation, the founder of the Save the Fish and Flowers Preservation Society wants to have the port declared a critical habitat for endangered sea turtles.

Willie Wilderness wants to keep pollution out of his favorite fishing ground.

Otto Bonn wants homeowners to plant trees in Big Bay County which will attract birds.

Joanie Seagull thinks that mangrove trees and grassbeds should be protected by state law.

Daisy Wildflower serves on the Governor's Task Force on Parks and Wildlife Preservation.

Pete Parks is a retired park ranger who guides school children on turtle watches and other wildlife tours.

TOURISTS

Your job:

to enjoy the beaches, seafood, good fishing and beauty of Big Bay County

Get to know your friends:

Sally Suntan comes to stay at the Lighthouse Point Vacation Villas every year for one month. She likes to see the baby turtles hatch.

Chicago Bound comes to Big Bay to visit his cousin who lives in Bayview Shores. Fishing in the canals is a favorite pastime.

Sunny Hours stays in the Milton Hotel during visits to Big Bay. The beaches with their beautiful sand and Big Cay's delicious seafood make vacations fun.

Ginny Snowbird enjoys the Convention Motel each year during the annual meeting of the Travelers of the World.

Toni Tours visits Big Bay each year on one of the cruise ships which stops at Port Florida.

Mary Goodtime and her family always stay at the Fisherman's Port Resort. They like to go deep sea fishing in the ocean and boating in Big Bay.

HOMEOWNERS

Your job:

you live in the homes along the canals bordering Big Bay

you take care of your house

you protect your house and family

you fish in the canals and bay

you launch or moor your boats in the backyard

Meet your friends:

Vista McGrass loves gardening, uses fertilizer which seeps into the Bay. Grass clippings are often raked into the water.

Patty Sandcastle has moved to Big Bay after visiting here for several years as a tourist.

Dunes Huhn lives on the beach. He wants a clear view of the ocean and private beaches.

Josie Taxpayer lives in Bayview Shores and worries that the cost of living in Big Bay will rise if there is less water to drink, fewer fish in the Bay and fewer boats coming to Port Florida.

Wendy Shore enjoys her home in Bayview Shores where her family can fish and catch crab from the backyard.

Muddy Waters launches his boat from Bayview Shores to fish in the Big Bay grassflats.

TONI TOURS 1 Tourist	**TONY TOURS** 1 Tourist
 SAMANTHA FIELDS 1 Farmer	**SAM FIELDS** 1 Farmer
HOPE WELLS 1 Petrol Products	**TEX WELLS** 1 Petrol Products
DOLLY HOLIDAY 1 Marina Operator	**DOCK HOLIDAY** 1 Marina Operator
BARBIE Q. MULLIGAN 1 Owner Seafood Restaurant	**STEW MULLIGAN** 1 Owner Seafood Restaurant

JON L. SEAGULL 1 Fish and Flower Preservation Society	**JOANIE L. SEAGULL** 1 Fish and Flower Preservation Society
MARGE OYSTERMAN 1 Commercial Fisherman	**BARGE OYSTERMAN** 1 Commercial Fisherman
VISTA McGRASS 1 Bayview Shores Homeowner	**VITO McGRASS** 1 Bayview Shores Homeowner
BEACON LIGHT 1 Port Authority	**BECKY LIGHT** 1 Port Authority
RONDA CASTER 1 Sports Fisherman	**ROD CASTER** 1 Sports Fisherman

TERRY TACKLESHOP 2 Marina Operator	**THERESA TACKLESHOP** 2 Marina Operator
CONRAD VENTION 2 Convention Motel	**CONNIE VENTION** 2 Convention Motel
BERTHA SHIP 2 Port Authority	**BERT SHIP** 2 Port Authority
BROOK TROUT 2 Sports Fisherman	**BRENDA TROUT** 2 Sports Fisherman
JOHN KETCHUM 2 Commercial Fisherman	**ANDI KETCHUM** 2 Commercial Fisherman

28

MARLA MANSIONS

2 Developer

MASON MANSION

2 Developer

WILLIE WILDERNESS

2 Fish and Flower Preservation Society

WINNIE WILDERNESS

2 Fish and Flower Preservation Society

R. E. ACTOR

2 OZ Power and Light

REA ACTOR

2 OZ Power and Light

ELLA OFFSHORE

2 Petrol Products

DEREK OFFSHORE

2 Petrol Products

MAGGIE MINING

2 Rocks to you Sand and Shell

STRIP MINING

2 Rocks to you Sand and Shell

 PATTY SANDCASTLE 3 Bayview Shores Homeowner	 **SANDY SANDCASTLE** 3 Bayview Shores Homeowner
SUE HOLMES 3 Developer	**JIM HOLMES** 3 Developer
 PAM PARKS 3 Fish and Flower Preservation Society	 **PETE PARKS** 3 Fish and Flower Preservation Society
PERCH FISHER 3 Sports Fisherman	**SKIP FISHER** 3 Sports Fisherman
VIOLET NEON 3 Neon Nook Motel	**NICKIE NEON** 3 Neon Nook Motel

LOTZA ROOM 3 Lighthouse Point Vacation Villas	**VAROOMVA ROOM** 3 Lighthouse Point Vacation Villas
 HENRIETTA PITS 3 Pits Gravel Company	 **HENRY PITS** 3 Pits Gravel Company
FLASH McLIGHT 3 OZ Power and Light	**FANNIE McLIGHT** 3 OZ Power and Light
SAM CLAM 3 Owner Seafood Restaurant	**FRAN CLAM** 3 Owner Seafood Restaurant
SALLY SEAMAN 3 Shipper	**CECIL SEAMAN** 3 Shipper

DUNE HUHN 4 Bayview Shores Homeowner	**JUNE HUHN** 4 Bayview Shores Homeowner
 WILMA MILTON 4 Milton Hotel	 **KONRED MILTON** 4 Milton Hotel
SANDY GRAVEL 4 Rocks to you Sand and Shell	**ANNE GRAVEL** 4 Rocks to you Sand and Shell
OLIVE OIL 4 Petrol Products	**"PEANUT" OIL** 4 Petrol Products
A. M. FARMER 4 Farmer	**I. M. FARMER** 4 Farmer

 JEAN O. RATER 4 OZ Power and Light	 **JED O. RATER** 4 OZ Power and Light
SNOOKER McGEE 4 Sports Fisherman	**SNOOKIE McGEE** 4 Sports Fisherman
 "SHRIMP" TRAPPER 4 Commercial Fisherman	 **SHRIMP TRAPPER** 4 Commercial Fisherman
SANDY SKIER 4 Small Boat Owner	**MANDY SKIER** 4 Small Boat Owner
JEAN ACRES 4 Developer	**MANNY ACRES** 4 Developer

SAFE T. HARBOR 5 Marina Operator	**HETHER HARBOR** 5 Marina Operator
OTTO BONN 5 Fish and Flower Preservation Society	**OUGHTTA BONN** 5 Fish and Flower Preservation Society
GINNY SNOWBIRD 5 Tourist	**FELIX SNOWBIRD** 5 Tourist
BARNEY BOATMAN 5 Small Boat Owner	**BRIGETT BOATMAN** 5 Small Boat Owner
ANITA ANGLERS 5 Sports Fisherman	**ED ANGLERS** 5 Sports Fisherman

COOKIE SWEET 5 Seafood Restaurant Cook	**DAVE SWEET** 5 Seafood Restaurant Cook
SALLY GOODSTORES 5 Developer	**NEU GOODSTORES** 5 Developer
 JESSIE JONES 5 Shipper	 **ONASSIS JONES** 5 Shipper
PATTI PLOWS 5 Farmer	**PETER PLOWS** 5 Farmer
JOE TAXPAYER 5 Bayview Shores Homeowner	**JOSIE TAXPAYER** 5 Bayview Shores Homeowner

 ROCKY SHORE 6 Bayview Shores Homeowner	 **WENDY SHORE** 6 Bayview Shores Homeowner
DRILLA DEEPER 6 Petrol Products	**DRILL DEEPER** 6 Petrol Products
 NETTIE FLOUNDER 6 Commercial Fisherman	 **NET FLOUNDER** 6 Commercial Fisherman
MINNIE VACANCY 6 Weeks Inn	**VINNIE VACANCY** 6 Weeks Inn
SUSIE SHOREACRE 6 Bayview Shores Homeowner	**TOM SHOREACRE** 6 Bayview Shores Homeowner

PHILOMENA PHOSTER 6 Phos-phates Inc.	**PHIL PHOSTER** 6 Phos-phates Inc.
 POP PRESERVATION 6 Fish and Flower Preservation Society	 **PENNY PRESERVATION** 6 Fish and Flower Preservation Society
PERRY CROPS 6 Farmer	**BETTY CROPS** 6 Farmer
PAT PIPELINE 6 Petrol Products	**PAUL PIPELINE** 6 Petrol Products
NEWTON GOOD 6 Developer	**SARAH GOOD** 6 Developer

SHELLY BUTTON 7 Rocks to you Sand and Shell	**SANFRED BUTTON** 7 Rocks to you Sand and Shell
 ERNIE OUTBOARD 7 Small Boat Owner	 **TINA OUTBOARD** 7 Small Boat Owner
MICHELE MANAGER 7 Far Away Point Resort	**MICKIE MANAGER** 7 Far Away Point Resort
GIN TITONIC 7 Shipper	**TAMMY TITONIC** 7 Shipper
CRABTRAP SINKER 7 Commercial Fisherman	**CHERRY SINKER** 7 Commercial Fisherman

MAYE FRY 7 Owner Seafood Restaurant	**FRITO FRY** 7 Owner Seafood Restaurant
HERTZ POWER 7 OZ Power and Light	**POLLY POWER** 7 OZ Power and Light
THEA TROPHY 7 Sports Fisherman	**BING TROPHY** 7 Sports Fisherman
HOWARD HOURS 7 Tourist.	**SUNNY HOURS** 7 Tourist
MARY GOODTIME 7 Tourist	**CHARLIE GOODTIME** 7 Tourist

MERRY SKIFF 7 Small Boat Owner	**MARVIN SKIFF** 7 Small Boat Owner
GOLDIE HARVEST 6 Farmer	**GLEN HARVEST** 6 Farmer
IRA GATES 5 Farmer	**IONA GATES** 5 Farmer
ROCKY BOULDER 4 Pitts Gravel	**RHONDA BOULDER** 4 Pitts Gravel
CLEM CHOWDER 3 Clems's Chowder Bar	**CLEMTHA CHOWDER** 3 Clems's Chowder Bar

SALLY SUNTAN 1 Tourist	**SAMMY SUNTAN** 1 Tourist
CHICAGO BOUND 2 Tourist	**SNOW BOUND** 2 Tourist
BOATRIGHT BAIT 3 Marina Operator	**BETTY BAIT** 3 Marina Operator
MARILYN MOORING 4 Marina Operator	**SKIP MOORING** 4 Marina Operator
DAISY WILDFLOWER 5 Fish and Flower Preservation Society	**KURT WILDFLOWER** 5 Fish and Flower Preservation Society

PETE PETROL 3 Petrol Products	**POLICIA PETROL** 3 Petrol Products
PETE PROGRESS 1 Developer	**PEARL B. PROGRESS** 1 Developer
MATIE SCALLOP 5 Commercial Fisherman	**MATILDA SCALLOP** 5 Commercial Fisherman
MUDDY WATERS 2 Bayview Shores Homeowner	**JUDY WATERS** 2 Bayview Shores Homeowner
COOL E. TOWER 7 OZ Power and Light	**LYLA TOWER** 7 OZ Power and Light

ROCKY SHRIMP 5 Owner Seafood Restaurant	**PINKIE SHRIMP** 5 Owner Seafood Restaurant
MAXINE MERCHANT 6 Shipper	**MAX MERCHANT** 6 Shipper
FISHER SESSON 7 Small Boat Owner	**FELICIA SESSON** 7 Small Boat Owner
SARA SPEEDWELL 2 Shipper	**PORTER SPEEDWELL** 2 Shipper
TESSE TANKER 4 Shipper	**SUPER TANKER** 4 Shipper

KELLY KILOWAT 2 OZ Power and Light	**KITTY KILOWAT** 2 OZ Power and Light
COMMODORE SALES 6 Commodore, Atlantic Yacht Club	**CONNIE SALES** 6 Head, Atlantic Yacht Club Auxilary

APPENDIX D

SPECIAL INTEREST SIGNS

SPORT FISHERMEN

43

46

47

PORT AUTHORITY

45

48

49

SHIPPERS

COMMERCIAL FISHERMEN

SEAFOOD RESTAURANT OWNERS

TOURISTS

MINING COMPANIES

MOTEL OWNERS

FARMERS

HOME OWNERS

SMALL BOAT OWNERS

PETROLEUM INDUSTRY

POWER & LIGHT CO.

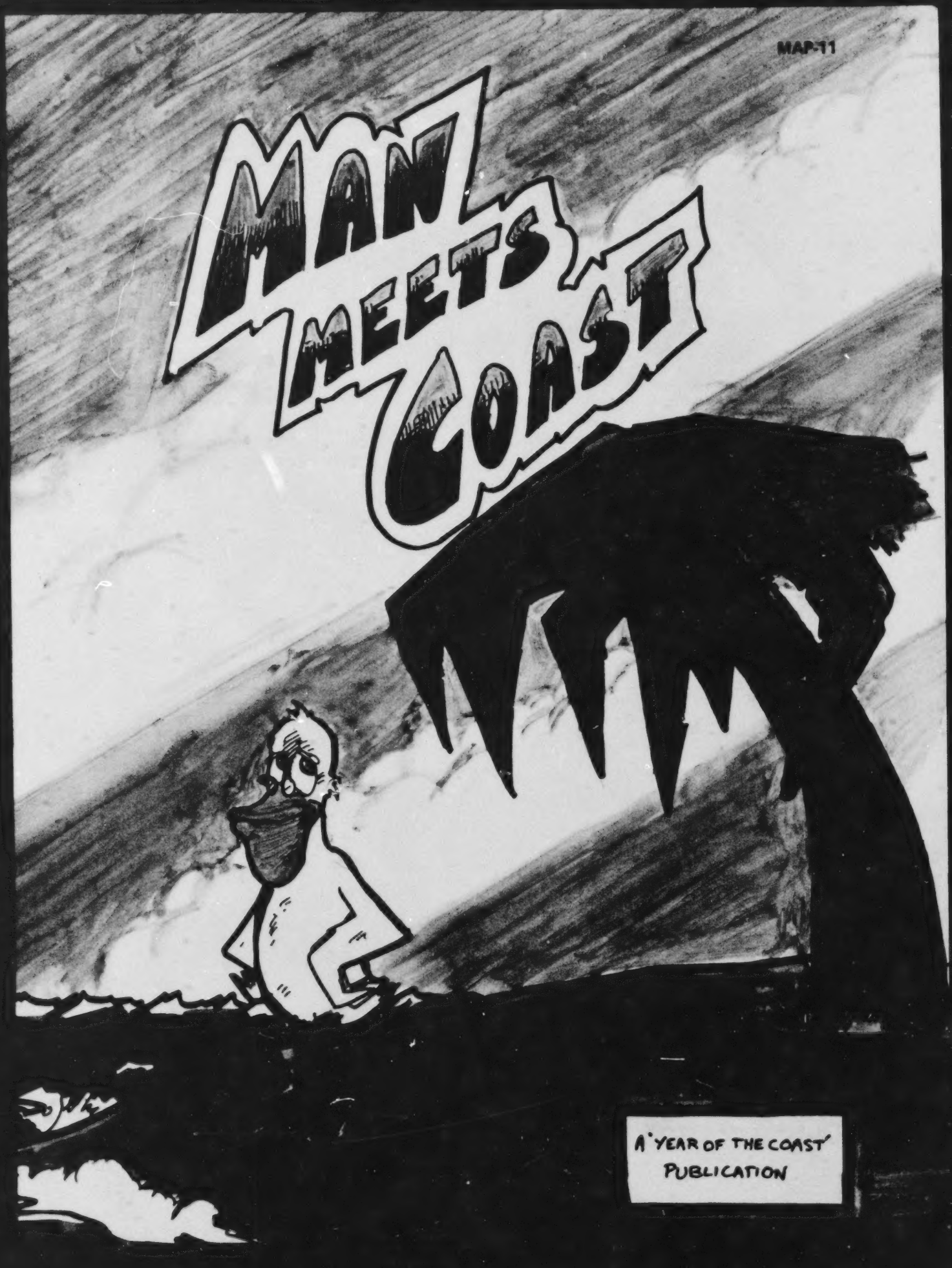
FISH AND FLOWER PRESERVATION SOCIETY

57

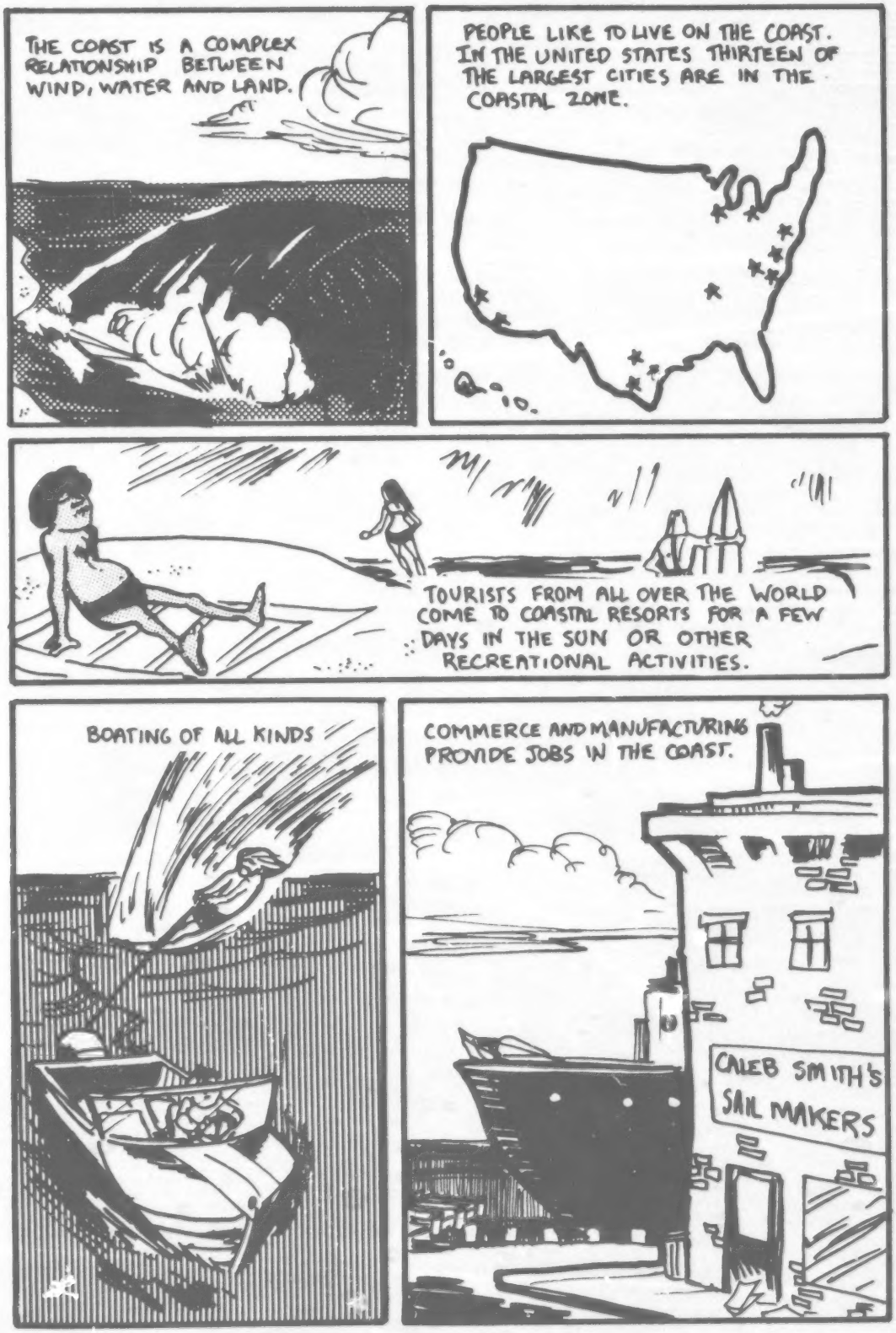
64

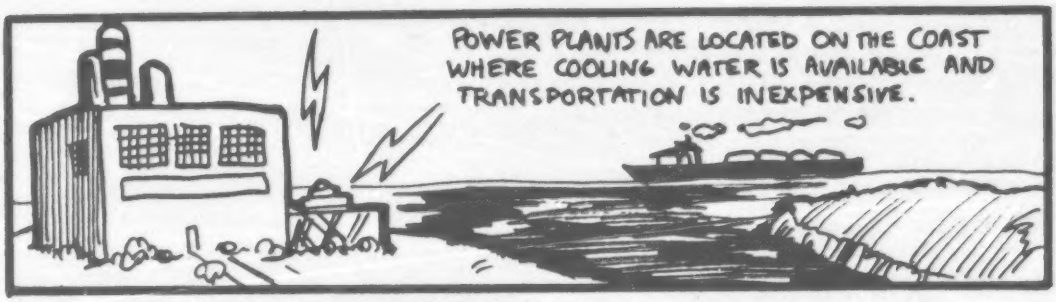
65

MARINA OPERATORS


MAP-11
MAN MEETS COAST
A 'YEAR OF THE COAST' PUBLICATION

FOR AS LONG AS I CAN REMEMBER PEOPLE HAVE BEEN ATTRACTED TO THE SPECIAL AREA WHERE LAND MEETS THE SEA.
SOME PEOPLE CALL THIS PLACE THE COAST BUT IT'S MORE THAN JUST SANDY SHORES.
I'm CLIFFORD D. FISCHER AND I'VE LIVED ON THE COAST ALL MY LIFE...
... BUT NOW I'M GETTING WORRIED ABOUT WHAT'S HAPPENING AROUND HERE.
THE COAST HAS ALWAYS PROVIDED A CENTER FOR MANY HUMAN ACTIVITIES


THE COAST IS A COMPLEX RELATIONSHIP BETWEEN WIND, WATER AND LAND.
PEOPLE LIKE TO LIVE ON THE COAST. IN THE UNITED STATES THIRTEEN OF THE LARGEST CITIES ARE IN THE COASTAL ZONE.
TOURISTS FROM ALL OVER THE WORLD COME TO COASTAL RESORTS FOR A FEW DAYS IN THE SUN OR OTHER RECREATIONAL ACTIVITIES.
BOATING OF ALL KINDS
COMMERCE AND MANUFACTURING PROVIDE JOBS IN THE COAST.
CALEB SMITH'S SAIL MAKERS

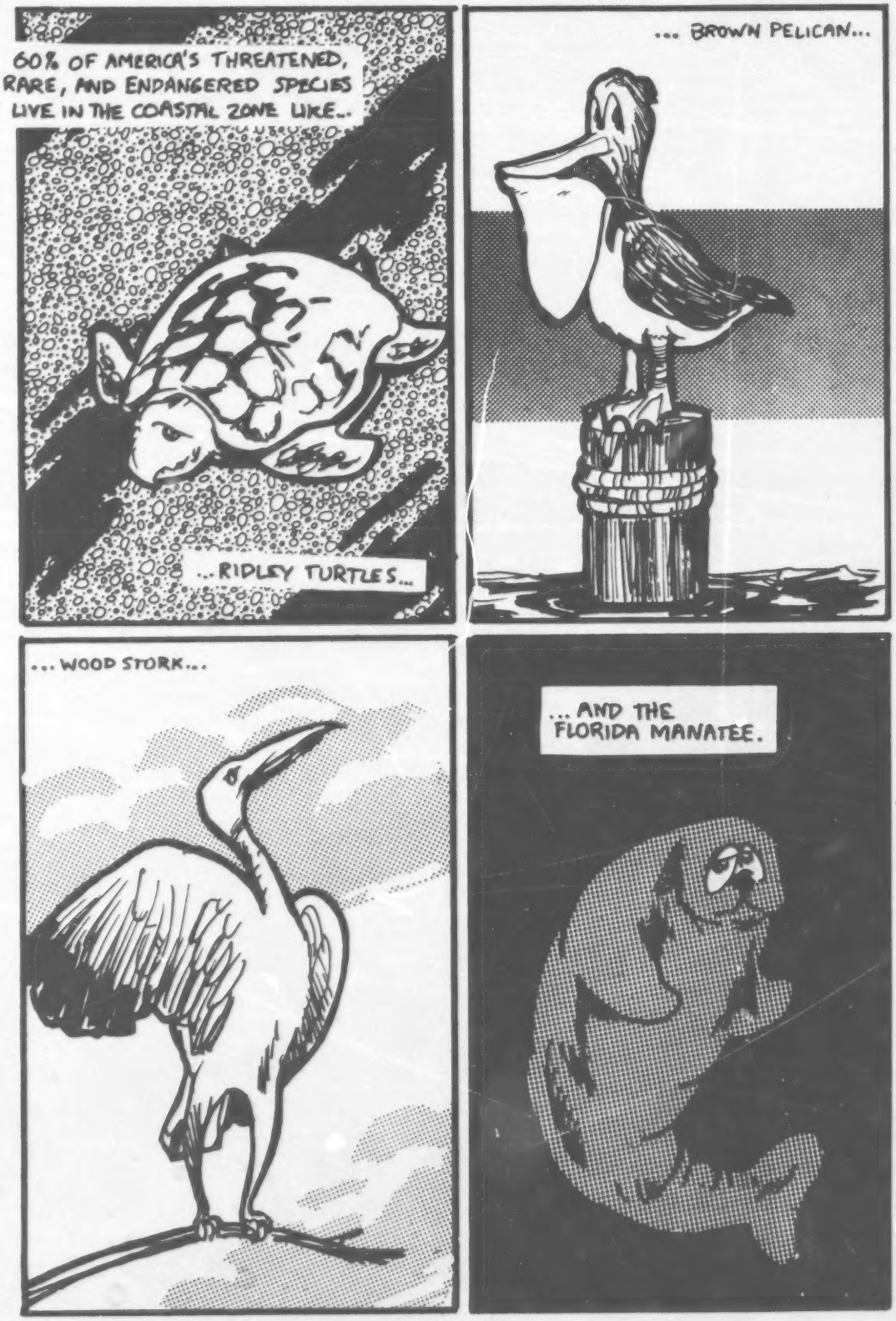

POWER PLANTS ARE LOCATED ON THE COAST WHERE COOLING WATER IS AVAILABLE AND TRANSPORTATION IS INEXPENSIVE.

SOME PEOPLE EVEN COME TO SEARCH FOR BURIED TREASURE.

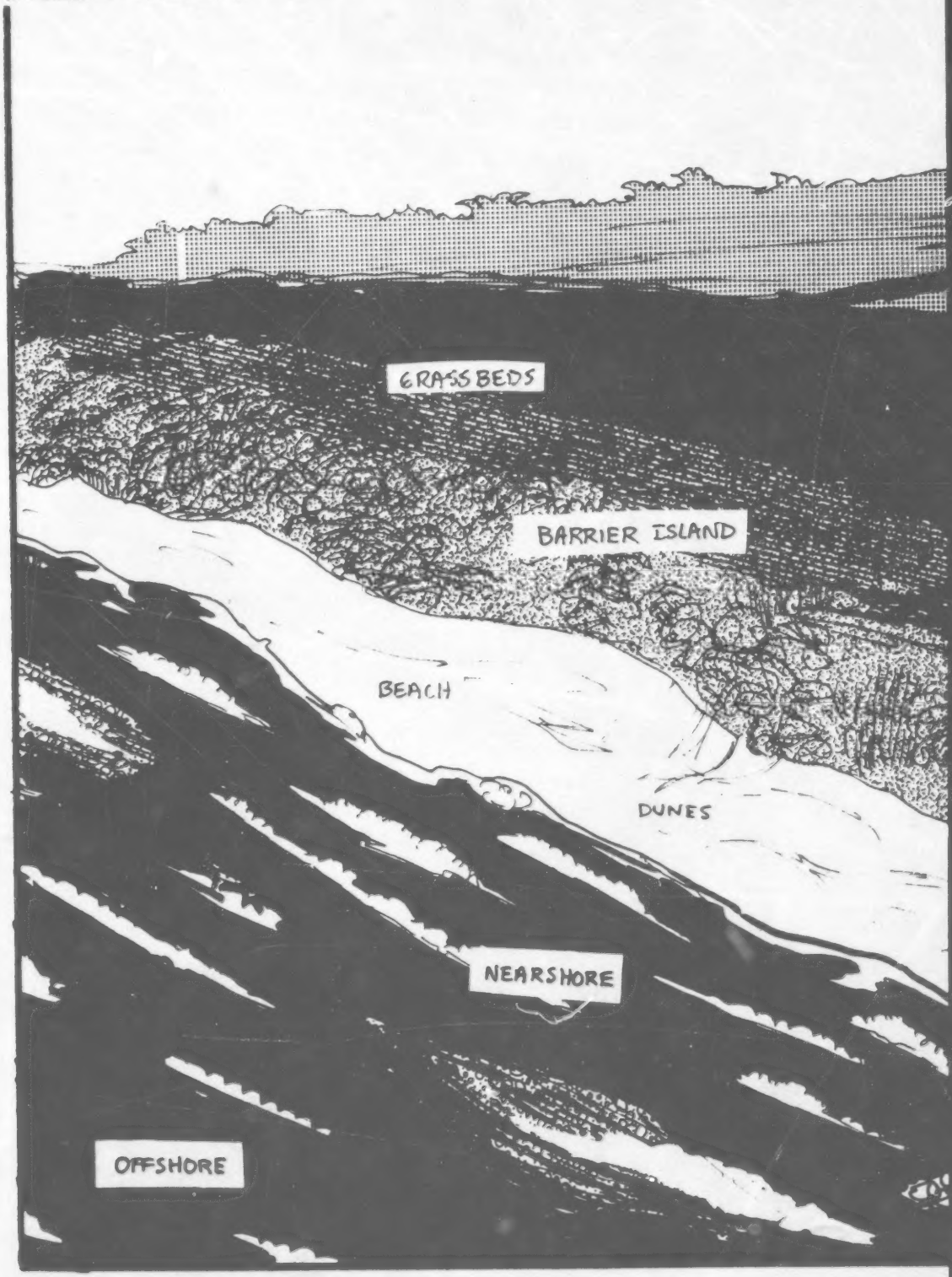
THE COAST PROVIDES FOOD - BOTH FIN FISH AND SHELL FISH.

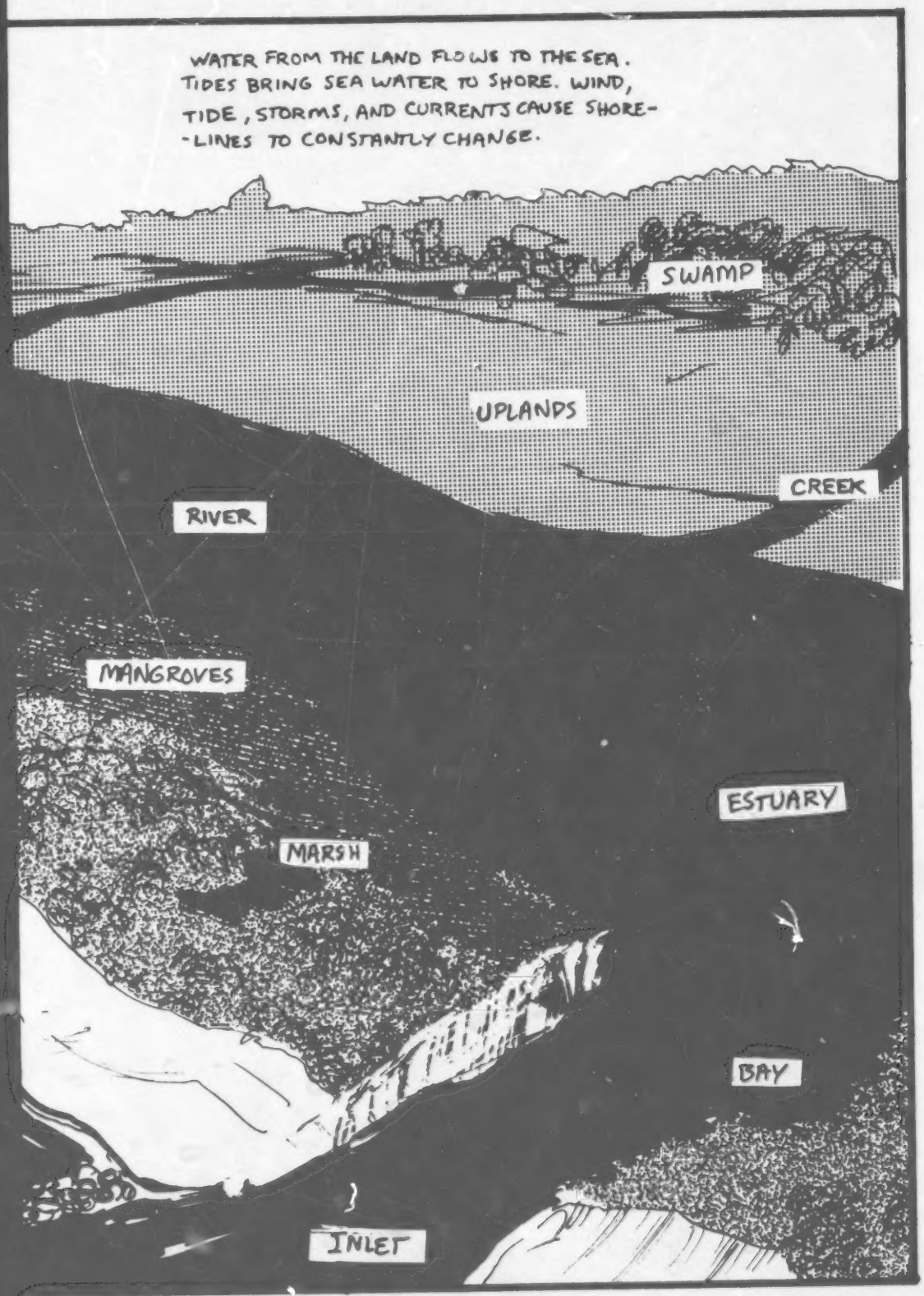
SEA CREATURES COME NEAR SHORE TO SPAWN, LAY EGGS, FIND FOOD, AND GROW BEFORE RETURNING TO THE SEA.

LAND ANIMALS COME TO FIND ABUNDANT FOOD AND RAISE THEIR YOUNG.


60% OF AMERICA'S THREATENED, RARE, AND ENDANGERED SPECIES LIVE IN THE COASTAL ZONE LIKE..
..RIDLEY TURTLES...
... BROWN PELICAN...
... WOOD STORK...
... AND THE FLORIDA MANATEE.

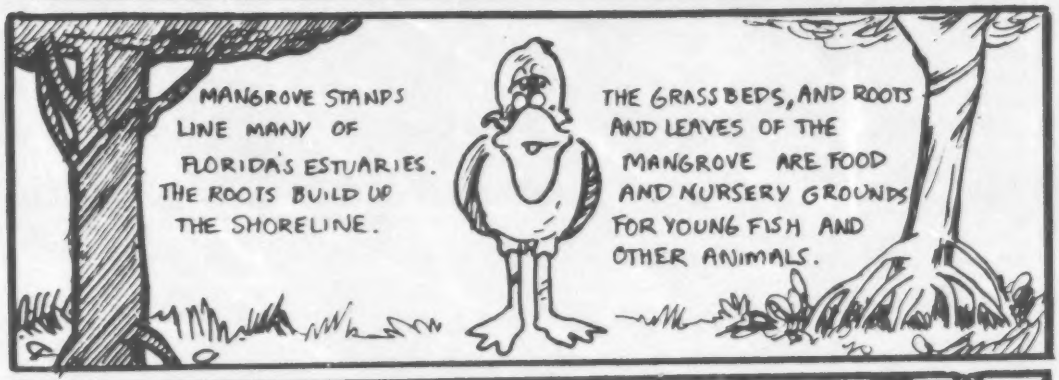
THE COAST IS MORE THAN A BEACH. IT IS A NATURAL SYSTEM MADE UP OF MANY PARTS. EACH PART OF THE COAST IS HOME TO DIFFERENT ANIMALS.

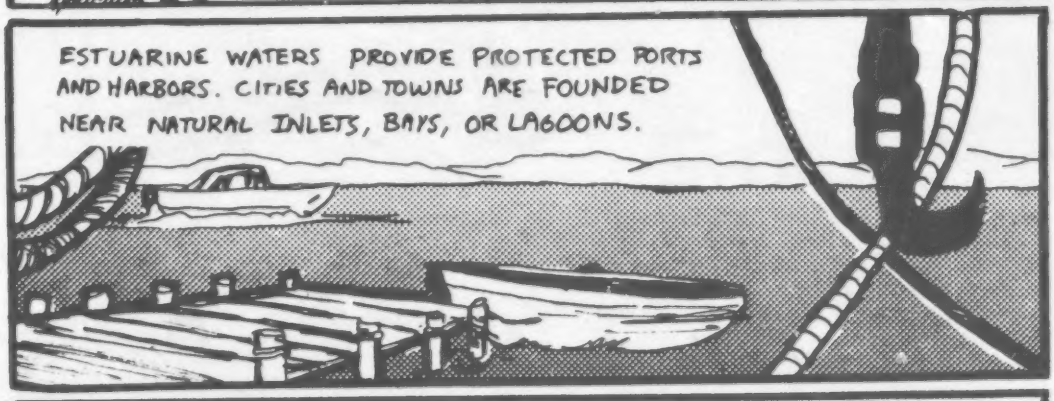



WATER FROM THE LAND FLOWS TO THE SEA. TIDES BRING SEA WATER TO SHORE. WIND, TIDE, STORMS, AND CURRENTS CAUSE SHORE-LINES TO CONSTANTLY CHANGE.
SWAMP
UPLANDS
CREEK
RIVER
MANGROVES
ESTUARY
MARSH
BAY
INLET

OFFSHORE, THE OPEN SEA BORDERS THE COAST.
NEARSHORE, SAND BARS AND REEFS PARALLEL THE BREAKING WAVES.
BEACHES AND SAND DUNES ABSORB THE ENERGY OF WAVES AND STORE SAND TO BE CARRIED TO SAND BARS DURING STORMS. DUNES PROTECT...
...THE BACK DUNE, PART OF THE BARRIER ISLAND.

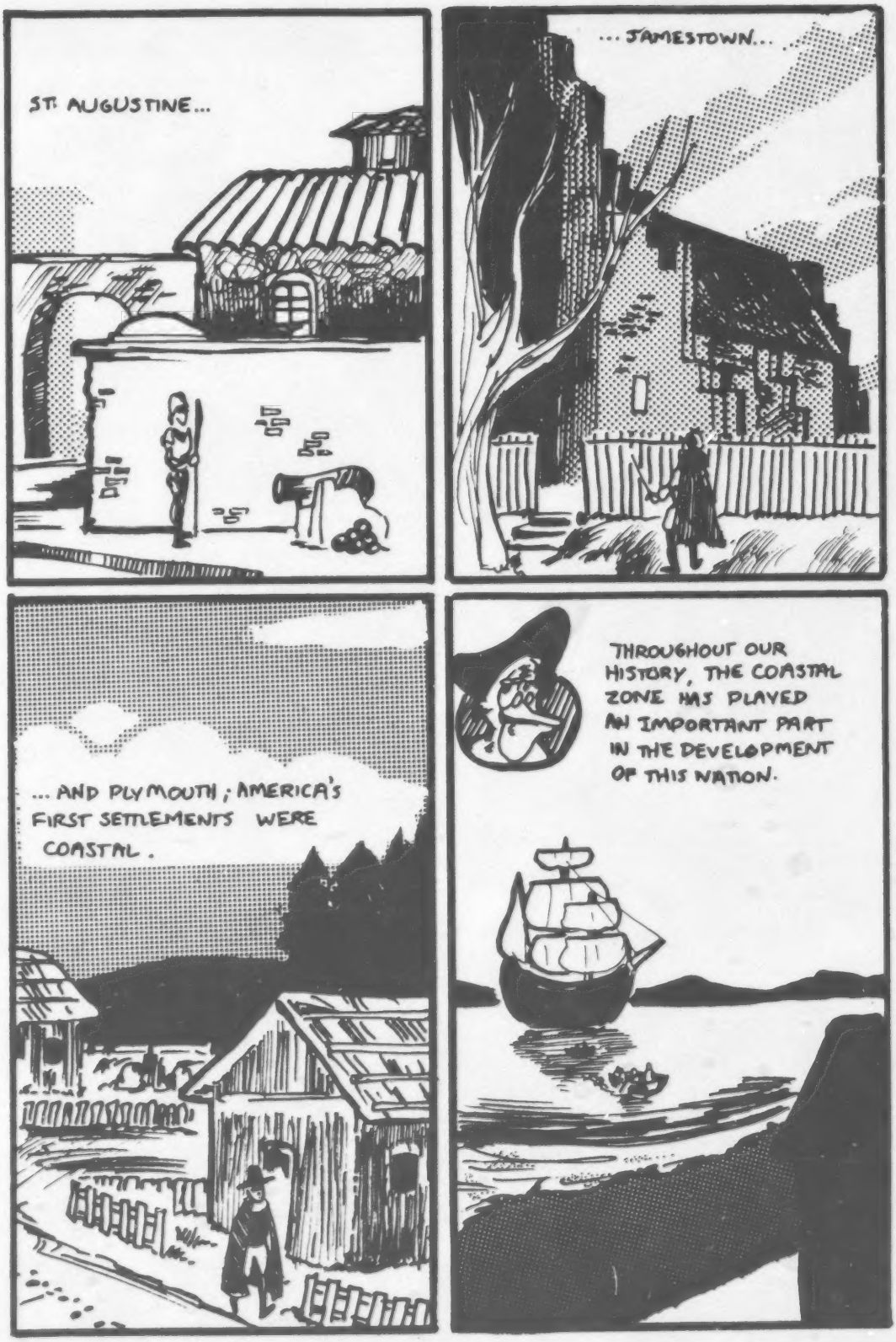
BARRIER ISLANDS LINE MANY COASTS, STANDING BETWEEN THE OCEAN AND THE ESTUARY.


MANGROVE STANDS LINE MANY OF FLORIDA'S ESTUARIES. THE ROOTS BUILD UP THE SHORELINE.
THE GRASS BEDS, AND ROOTS AND LEAVES OF THE MANGROVE ARE FOOD AND NURSERY GROUNDS FOR YOUNG FISH AND OTHER ANIMALS.


ESTUARINE WATERS PROVIDE PROTECTED PORTS AND HARBORS. CITIES AND TOWNS ARE FOUNDED NEAR NATURAL INLETS, BAYS, OR LAGOONS.

SALT MARSHES AND WETLANDS BUFFER COASTAL STORMS, TRAP NUTRIENTS, SEDIMENTS, AND POLLUTANTS WASHED SEAWARD FROM THE UPLANDS. THESE WETLANDS ARE A LIFE SUPPORT SYSTEM FOR THE EARLY LIFE CYCLE OF SHRIMP, CRABS, AND FISH.

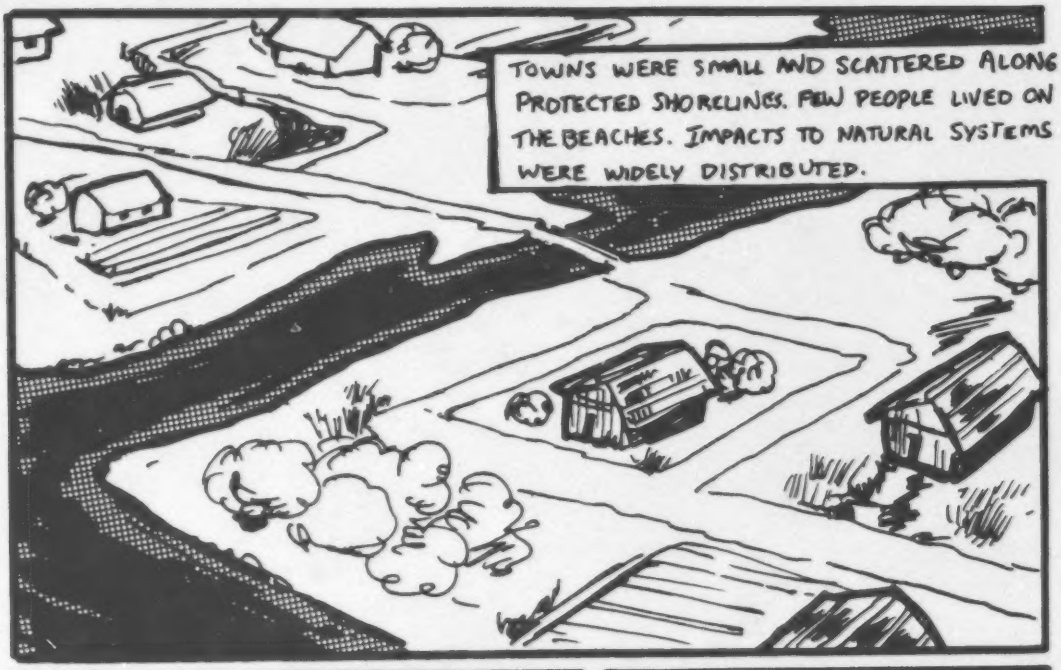
THE ESTUARY, WITH IT'S SHALLOW GRASSBEDS, BECOMES A WARM SOUP OF NUTRIENTS AND FOOD GENTLY STIRRED BY WIND AND TIDE. PLANTS GROW WELL. MANY LAND AND SEA ANIMALS SPEND PART OF THEIR LIVES IN THE PROTECTION AND COVER OF THE ESTUARY. 70 TO 80% OF THE FISH CAUGHT COMMERCIALLY AT SEA USE THE COASTAL WATERS FOR BREEDING AND NURSERY GROUNDS.


ST. AUGUSTINE...
... JAMESTOWN...
... AND PLYMOUTH; AMERICA'S FIRST SETTLEMENTS WERE COASTAL.
THROUGHOUT OUR HISTORY, THE COASTAL ZONE HAS PLAYED AN IMPORTANT PART IN THE DEVELOPMENT OF THIS NATION.

MARITIME STRENGTH...

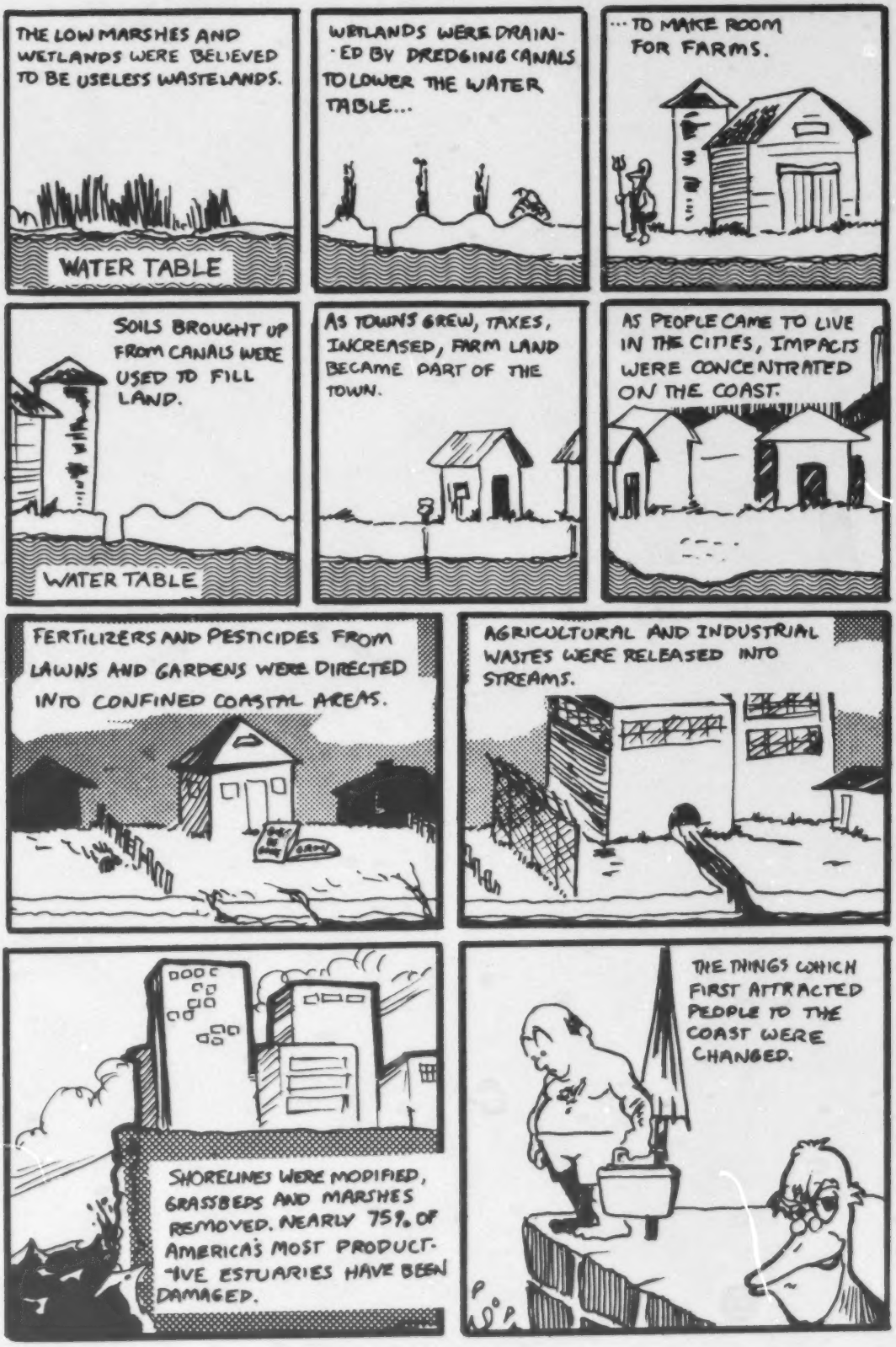
FISHING...
... AND WHALING WERE FOUNDATIONS OF THE EARLY HISTORY OF THE U.S.
...AND A CHIEF MEANS OF TRANSPORTATION.
COASTAL TRADE FOR SUGAR, RUM, SLAVES, PEPPER. AND SPICES WERE AN EARLY BASIS FOR THE RAPIDLY EXPANDING AMERICAN ECONOMY.

7J

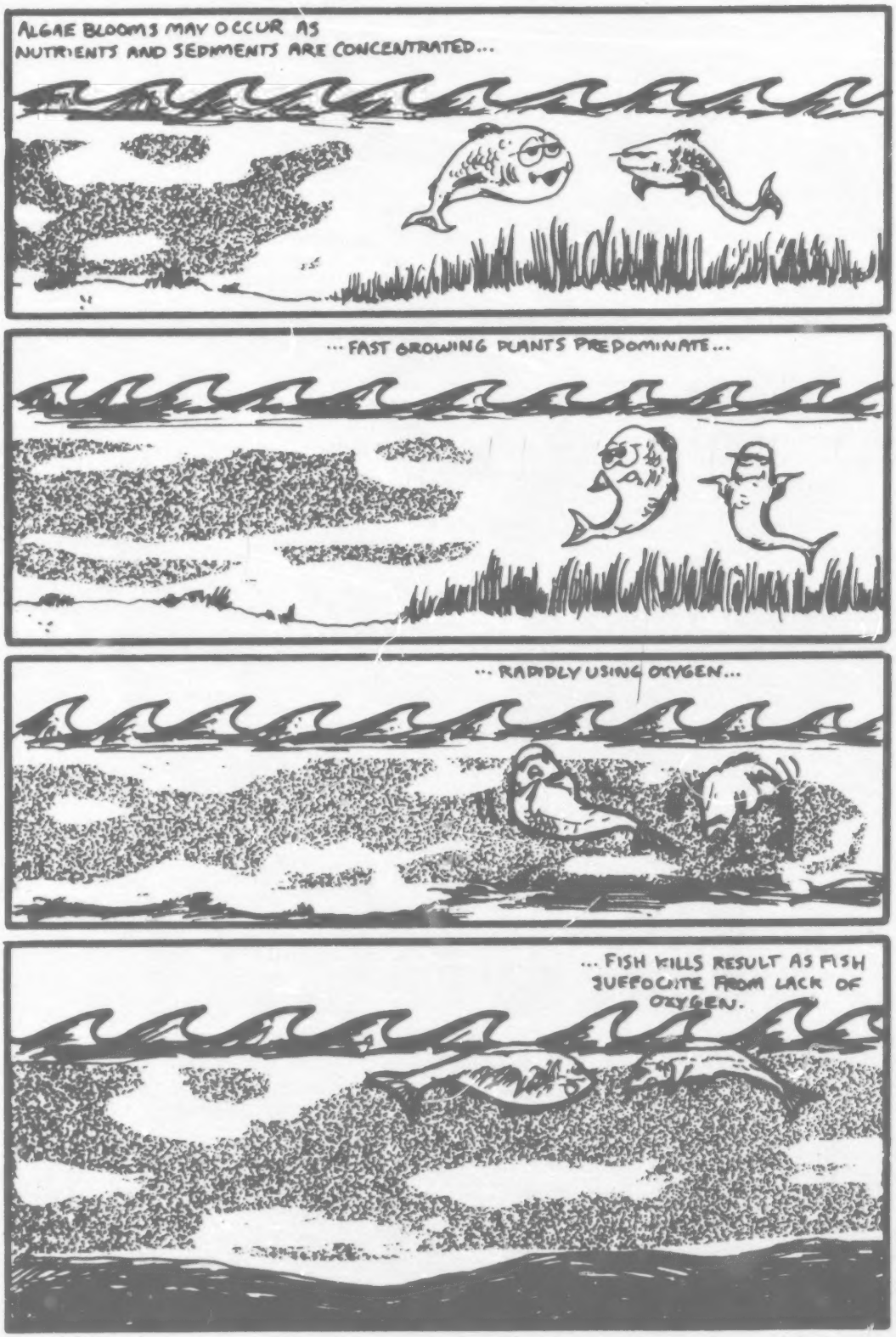

TOWNS WERE SMALL AND SCATTERED ALONG PROTECTED SHORELINES. FEW PEOPLE LIVED ON THE BEACHES. IMPACTS TO NATURAL SYSTEMS WERE WIDELY DISTRIBUTED.

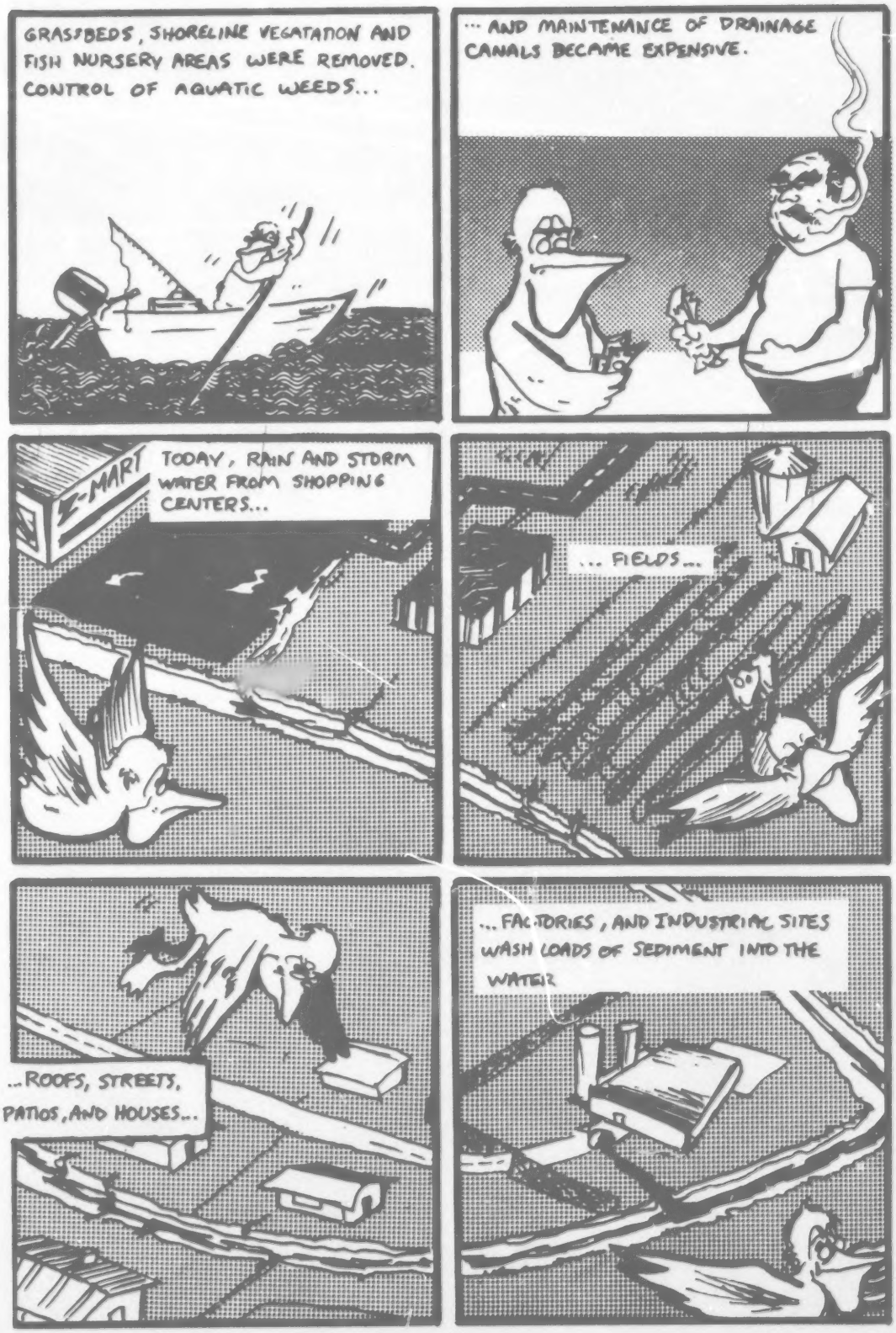
SEEMINGLY UNLIMITED NATURAL RESOURCES FED PEOPLE, PROVIDED JOBS...

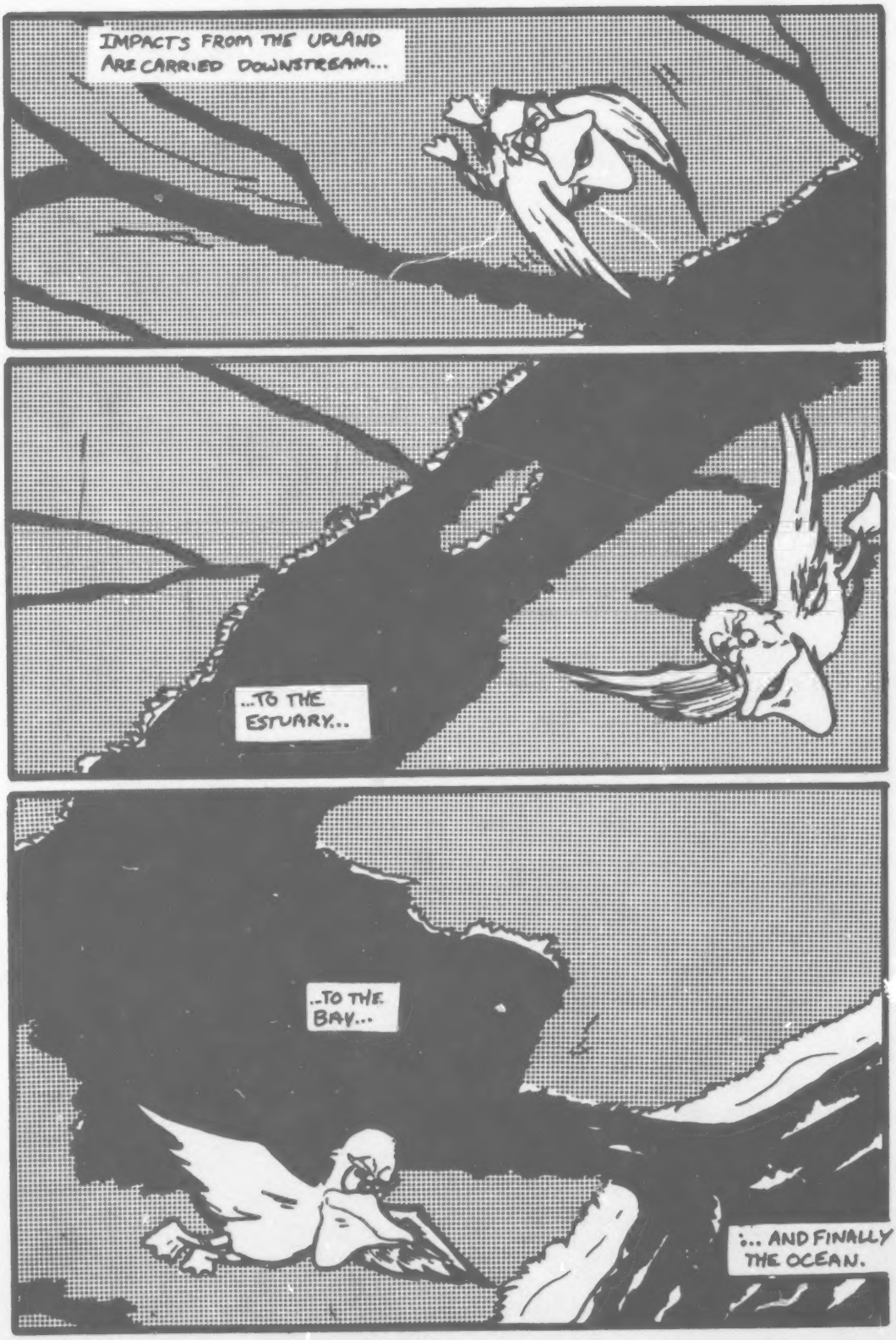
...AND SPURRED THE DEVELOPMENT OF MANY COMMUNITIES.


THE LOW MARSHES AND WETLANDS WERE BELIEVED TO BE USELESS WASTELANDS.
WATER TABLE
WETLANDS WERE DRAINED BY DREDGING CANALS TO LOWER THE WATER TABLE...
... TO MAKE ROOM FOR FARMS.
SOILS BROUGHT UP FROM CANALS WERE USED TO FILL LAND.
WATER TABLE
AS TOWNS GREW, TAXES, INCREASED, FARM LAND BECAME PART OF THE TOWN.
AS PEOPLE CAME TO LIVE IN THE CITIES, IMPACTS WERE CONCENTRATED ON THE COAST.
FERTILIZERS AND PESTICIDES FROM LAWNS AND GARDENS WERE DIRECTED INTO CONFINED COASTAL AREAS.
AGRICULTURAL AND INDUSTRIAL WASTES WERE RELEASED INTO STREAMS.
SHORELINES WERE MODIFIED, GRASSBEDS AND MARSHES REMOVED. NEARLY 75% OF AMERICA'S MOST PRODUCTIVE ESTUARIES HAVE BEEN DAMAGED.
THE THINGS WHICH FIRST ATTRACTED PEOPLE TO THE COAST WERE CHANGED.

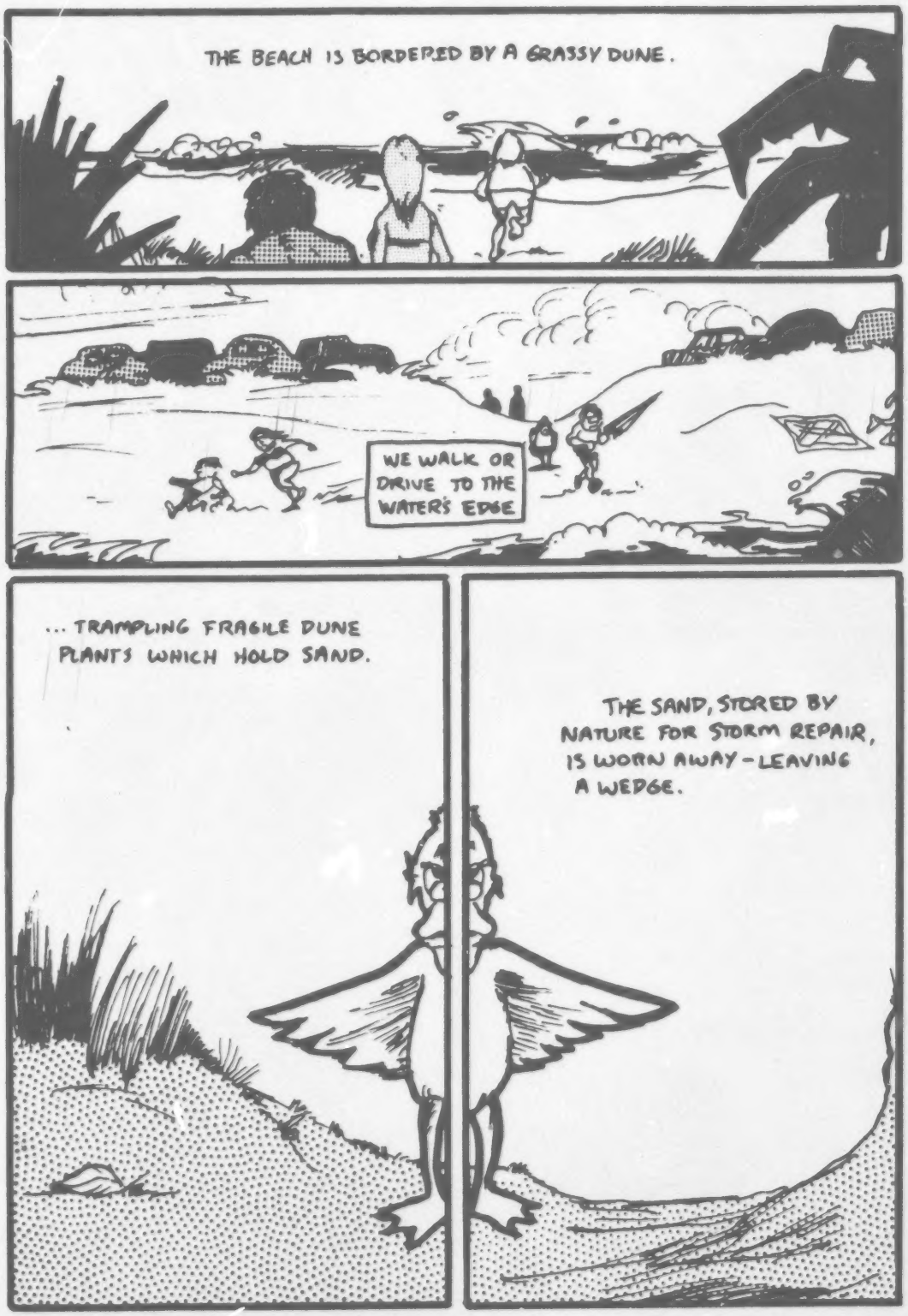
NATURAL AREAS WHICH ATTRACTED MARINE LIFE...
... WERE DREDGED AND FILLED.
WATER CANT SOAK INTO THE GROUND THROUGH PAVEMENT AND STREETS, TO SUPPLY DRINKING WATER WELLS.
MANY COASTAL CITIES HAD A POOR SUPPLY OF WATER DURING PARTS OF THE YEAR.
BIG BAY COUNTY GAZETTE
DROUGHT
BAN ON CAR WASHING
WATER BILLS GOING UP!
SALT WATER INTRUSION

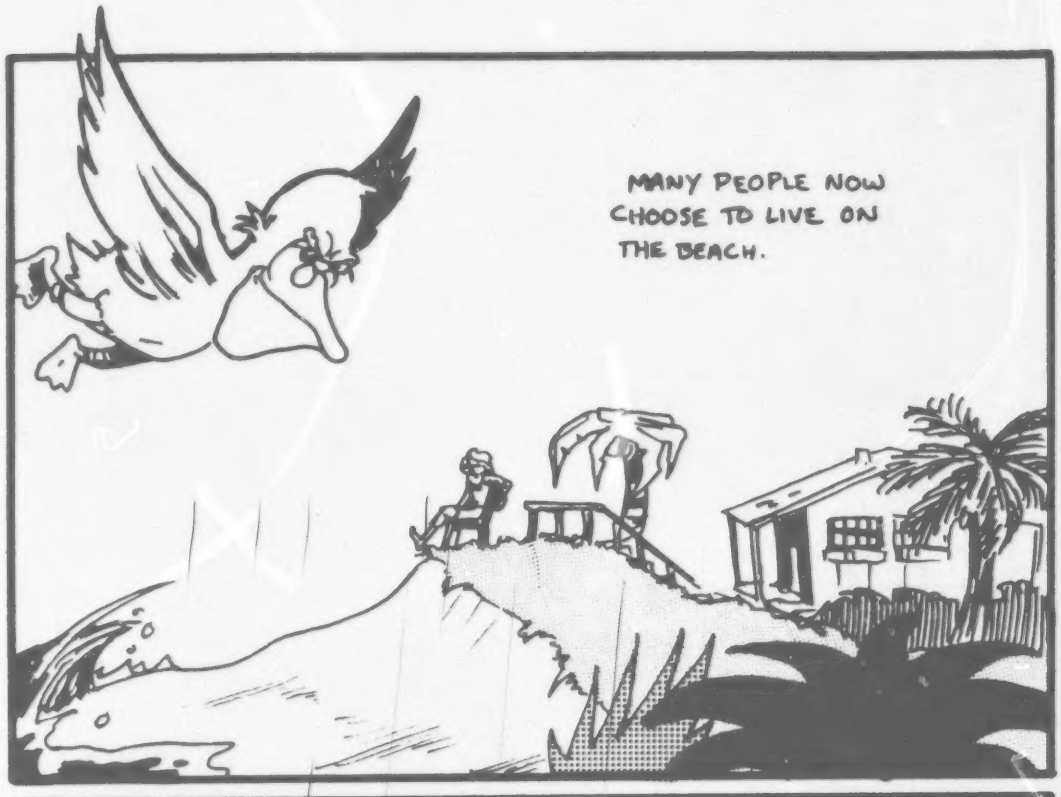

ALGAE BLOOMS MAY OCCUR AS NUTRIENTS AND SEDIMENTS ARE CONCENTRATED...
... FAST GROWING PLANTS PREDOMINATE...
... RAPIDLY USING OXYGEN...
... FISH KILLS RESULT AS FISH SUFFOCATE FROM LACK OF OXYGEN.


GRASSBEDS, SHORELINE VEGATATION AND FISH NURSERY AREAS WERE REMOVED. CONTROL OF AQUATIC WEEDS...
... AND MAINTENANCE OF DRAINAGE CANALS BECAME EXPENSIVE.
E-MART
TODAY, RAIN AND STORM WATER FROM SHOPPING CENTERS...
... FIELDS...
...ROOFS, STREETS, PATIOS, AND HOUSES...
... FACTORIES, AND INDUSTRIAL SITES WASH LOADS OF SEDIMENT INTO THE WATER

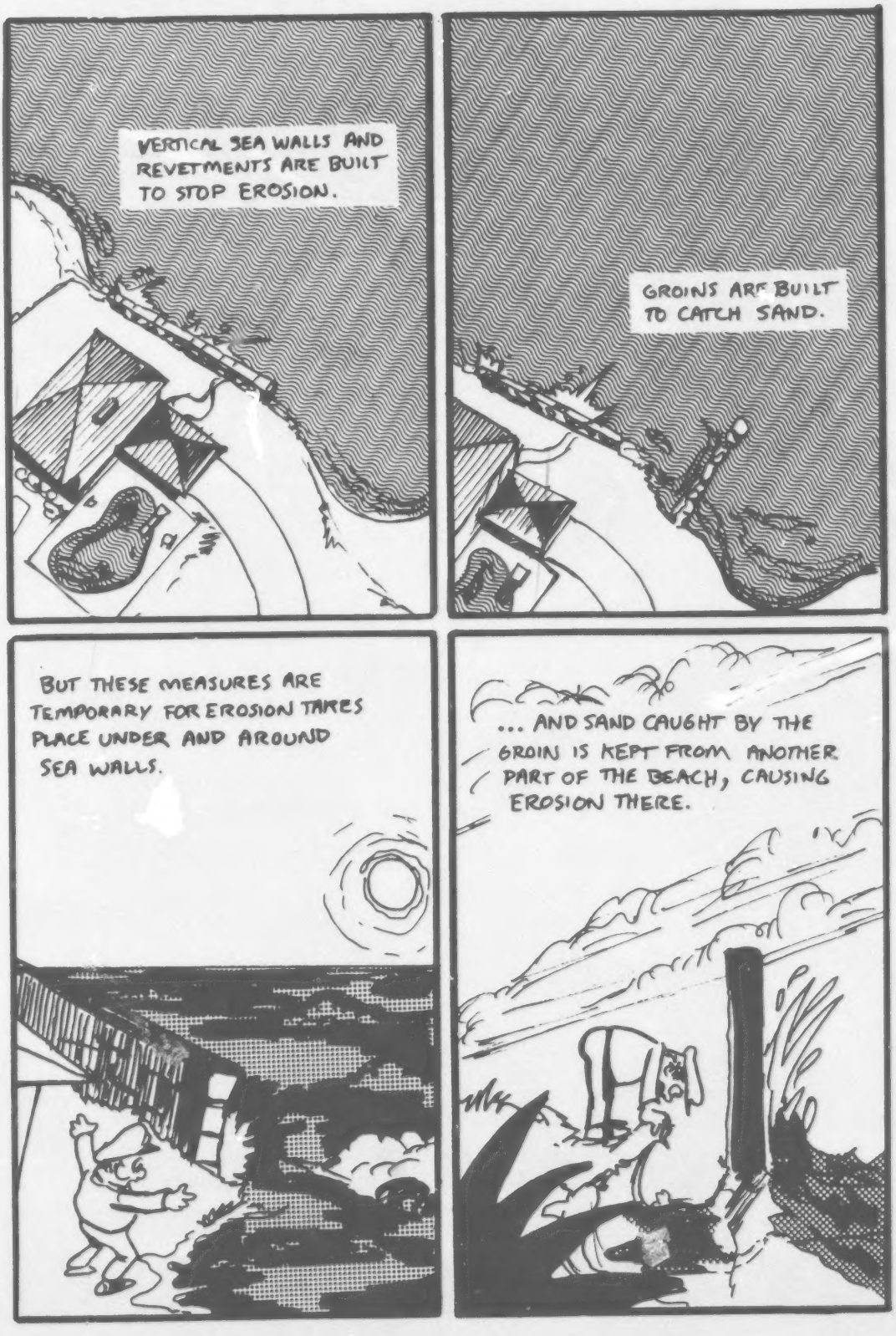

IMPACTS FROM THE UPLAND ARE CARRIED DOWNSTREAM...
...TO THE ESTUARY...
..TO THE BAY...
... AND FINALLY THE OCEAN.

WHAT PEOPLE DO AFFECTS FISHING BOTH NEARSHORE...
...AND OFFSHORE.
BUT I STILL LIKE THE COAST.
... SO DO MOST AMERICANS, ON THE AVERAGE EACH PERSON SPENDS ABOUT 10 DAYS PER YEAR IN OCEAN RELATED RECREATION.
BUT HOW DO YOU GET TO THE BEACH?

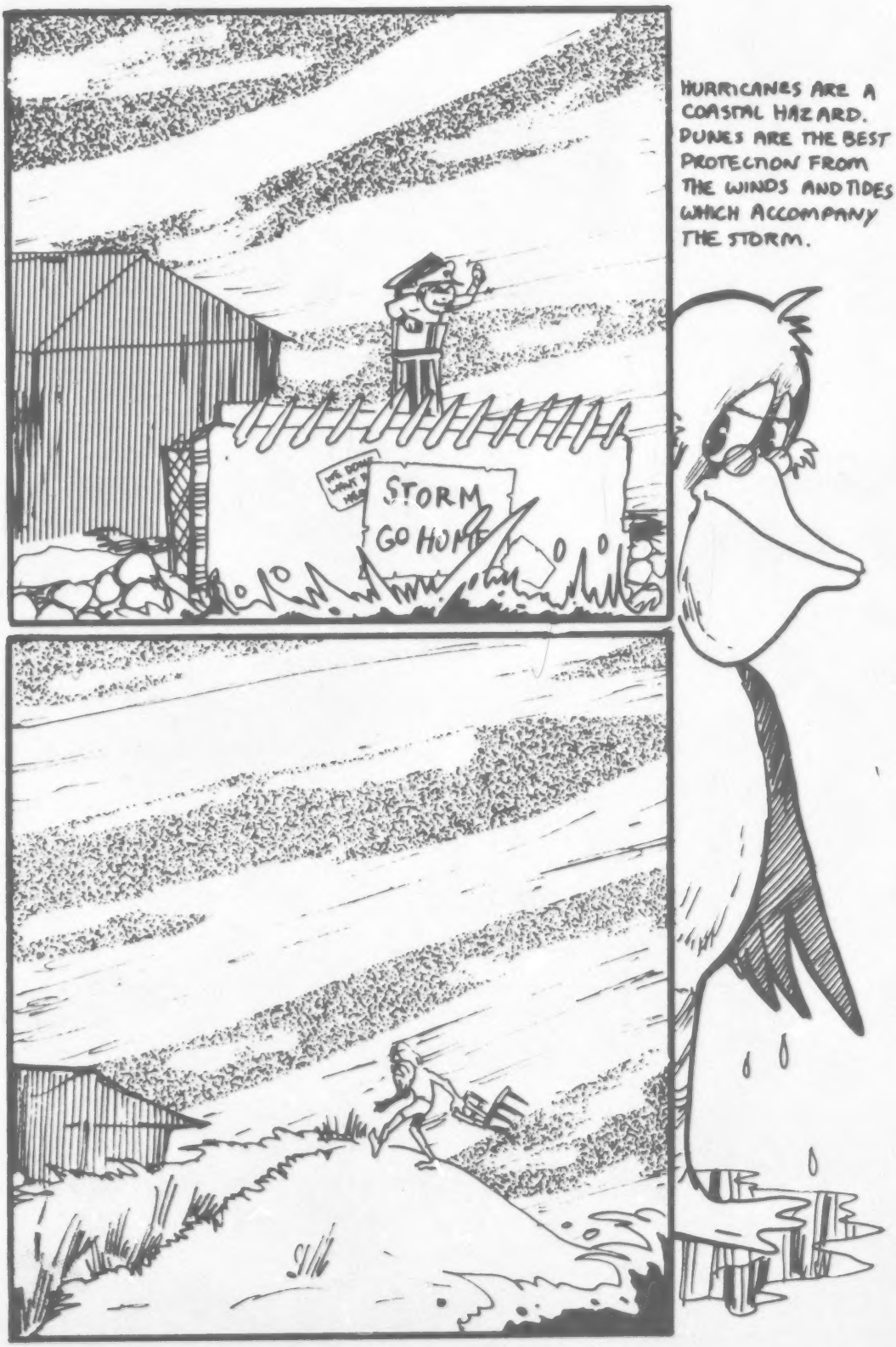

THE BEACH IS BORDERED BY A GRASSY DUNE.
WE WALK OR DRIVE TO THE WATER'S EDGE
... TRAMPLING FRAGILE DUNE PLANTS WHICH HOLD SAND.
THE SAND, STORED BY NATURE FOR STORM REPAIR, IS WORN AWAY - LEAVING A WEDGE.

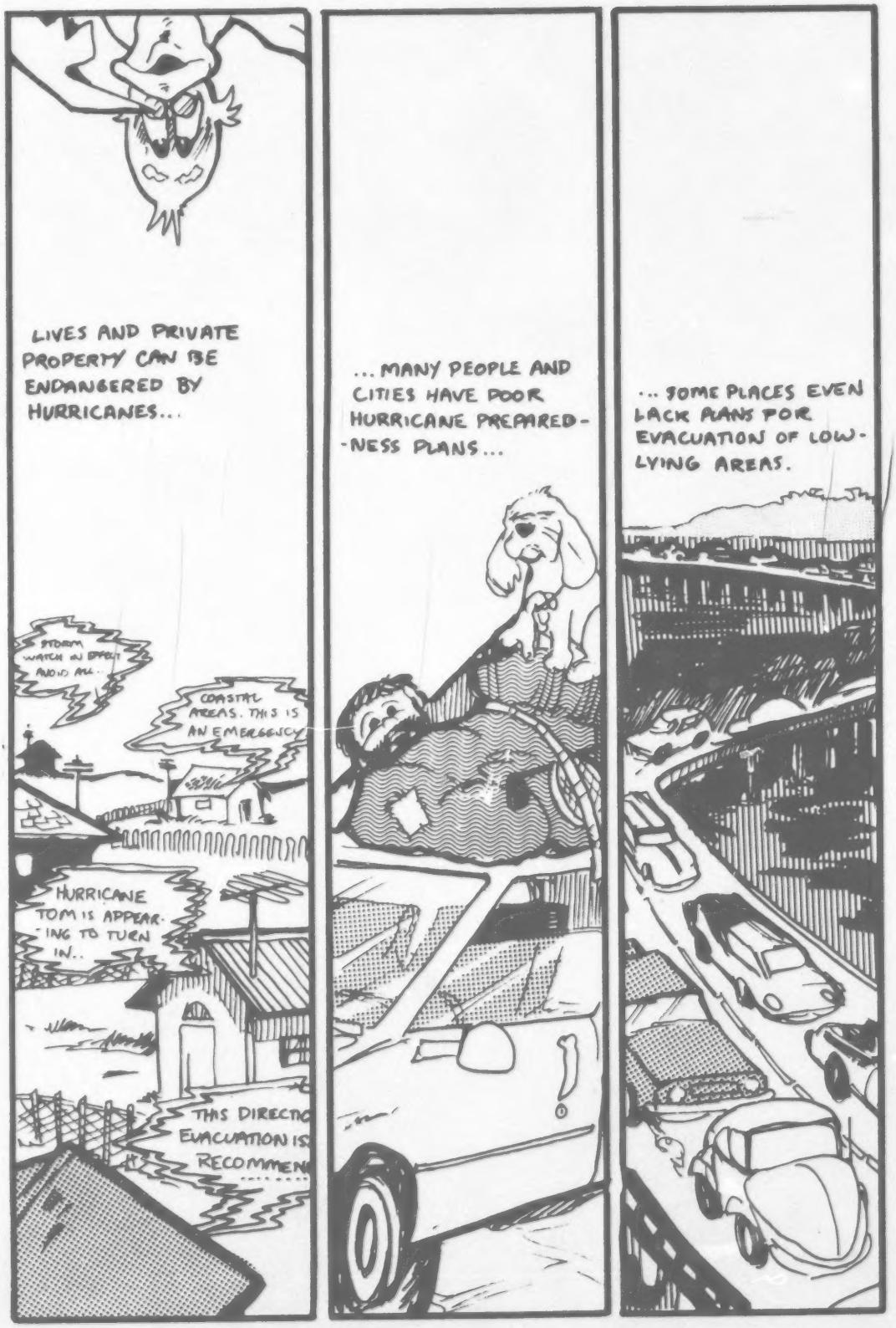

MANY PEOPLE NOW CHOOSE TO LIVE ON THE BEACH.

SOME BUILD CLOSER AND CLOSER TO THE SHORE, SOON FINDING THAT THE VERY BEACH THEY CAME TO SEE IS DESTROYED BY BUILDINGS PLACED SO CLOSE TO THE SEA.


VERTICAL SEA WALLS AND REVETMENTS ARE BUILT TO STOP EROSION.
GROINS ARE BUILT TO CATCH SAND.
BUT THESE MEASURES ARE TEMPORARY FOR EROSION TAKES PLACE UNDER AND AROUND SEA WALLS.
... AND SAND CAUGHT BY THE GROIN IS KEPT FROM ANOTHER PART OF THE BEACH, CAUSING EROSION THERE.

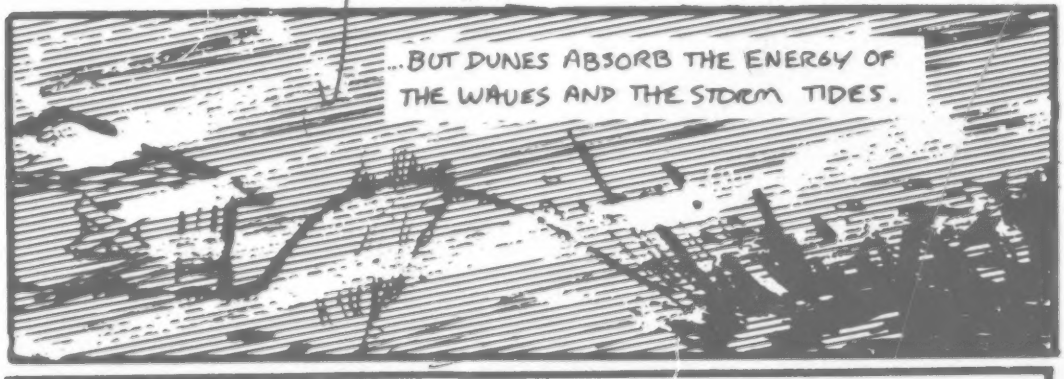
IN SOME PLACES DUNES ARE GONE. BUILDINGS BLOCK PEOPLES WAY TO THE BEACH. ONLY 2% OF AMERICA'S SHORELINE IS OWNED BY THE PUBLIC...
BEACH
EL EXCLUSO
INSURE YOUR INVESTMENT BUY IN NOW! ONLY 2 UNITS LEFT
...THATS ABOUT 1 SQUARE INCH PER PERSON.


STORM
GO HOME
HURRICANES ARE A COASTAL HAZARD. DUNES ARE THE BEST PROTECTION FROM THE WINDS AND TIDES WHICH ACCOMPANY THE STORM.

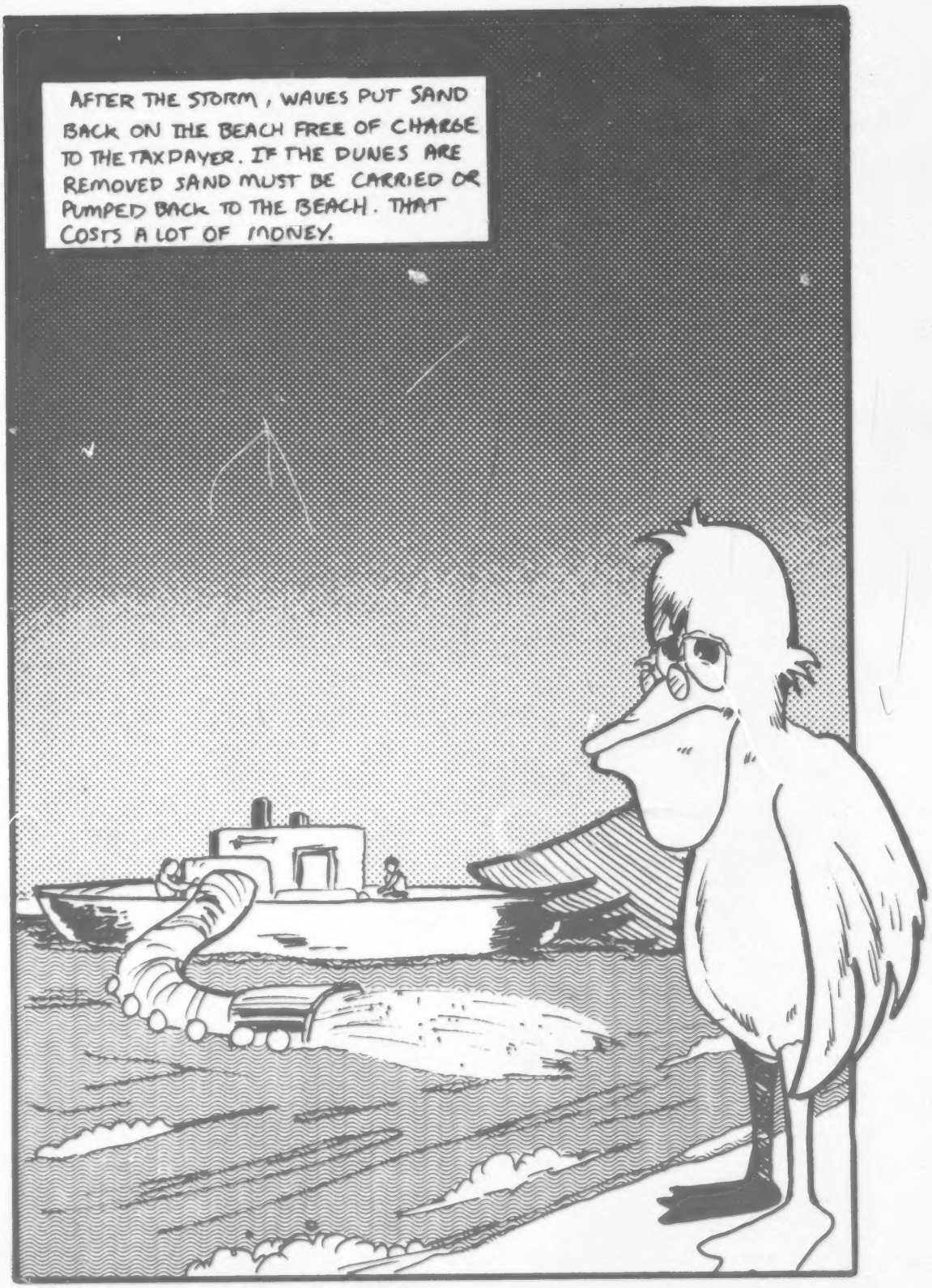

LIVES AND PRIVATE PROPERTY CAN BE ENDANGERED BY HURRICANES...
STORM WATCH IN EFFECT AND...
COASTAL AREAS. THIS IS AN EMERGENCY
HURRICANE TOM IS APPEAR-ING TO TURN IN..
THIS DIRECTIO EVACUATION IS RECOMMEN
... MANY PEOPLE AND CITIES HAVE POOR HURRICANE PREPARED--NESS PLANS...
... SOME PLACES EVEN LACK PLANS FOR EVACUATION OF LOW-LYING AREAS.

DURING THE HURRICANE WIND, TIDE, AND STORM SURGES MOVE WATER THROUGH THE PATHS WORN IN THE DUNE... WAVES SCOUR SAND FROM AROUND AND UNDER THE SEAWALLS.

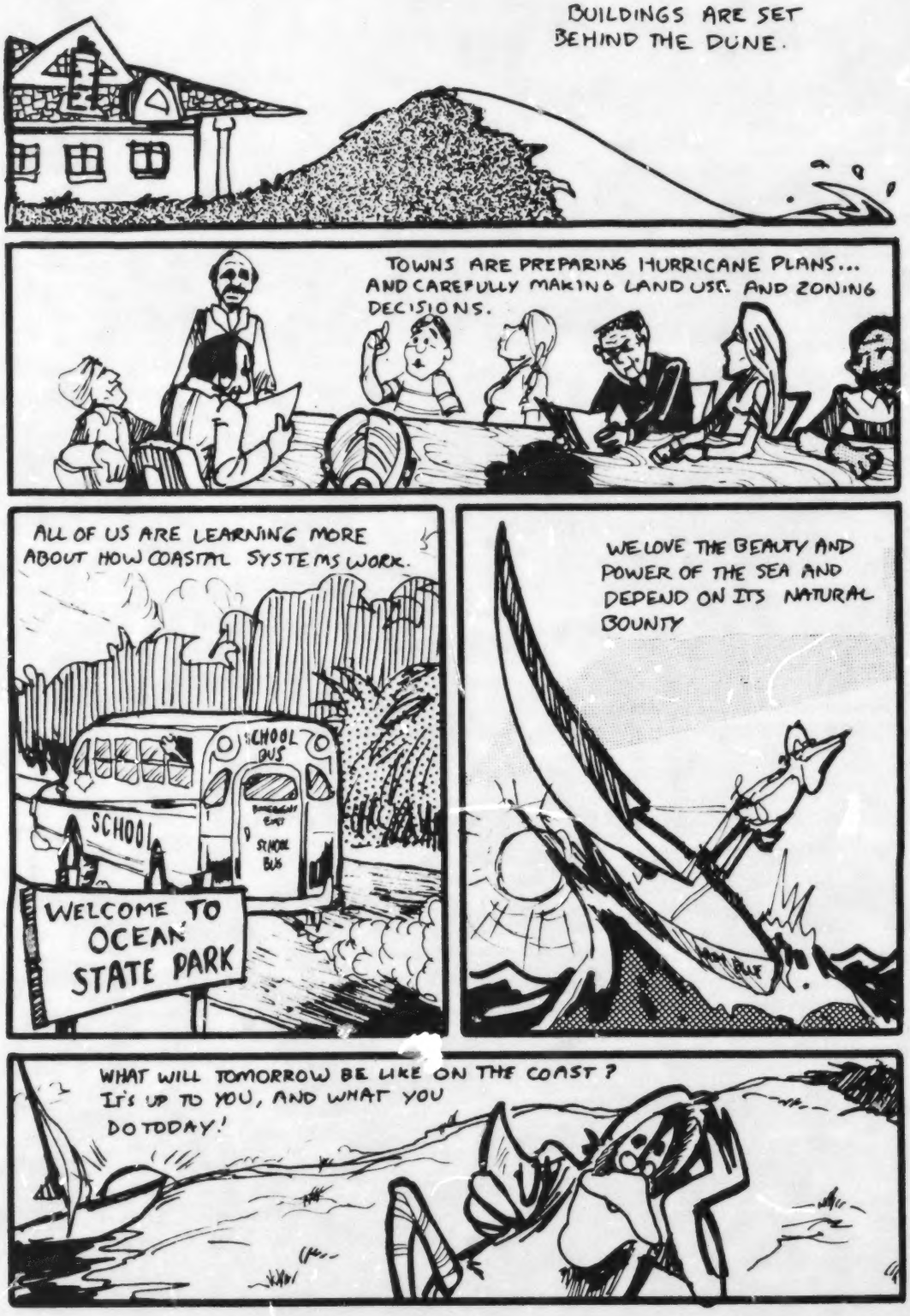
I GET BLOWN AROUND QUITE A BIT...


...BUT DUNES ABSORB THE ENERGY OF THE WAVES AND THE STORM TIDES.

PLANTS ON THE DUNE HOLD SAND IN PLACE. SAND WASHED AWAY FROM THE FOREDUNE IS STORED ON THE OFFSHORE BAR.


AFTER THE STORM, WAVES PUT SAND BACK ON THE BEACH FREE OF CHARGE TO THE TAXPAYER. IF THE DUNES ARE REMOVED SAND MUST BE CARRIED OR PUMPED BACK TO THE BEACH. THAT COSTS A LOT OF MONEY.

NOWADAYS PEOPLE SEEM TO SEE THE VALUE OF AMERICA'S COASTAL RESOURCES...
.. FOR RECREATION...
.. FLOOD PROTECTION...
AND FISHERIES.
LAWS HAVE BEEN PASSED TO HELP CITIES AND STATES PLAN FOR THE WISE USE OF THE COAST
COASTAL ZONE MANAGEMENT ACT
LOCAL GOVERNMENT COASTAL PROTECTION PLAN
ENVIORMENTAL LAWS PROTECT ENDANGERED ANIMALS AND REDUCE AIR AND WATER POLLUTION.
ENDANGERED SPECIES SANCTUARY
DUNE WALKOVERS MAKE PATHS TO THE BEACH SAFE FOR PEOPLE AND PRESERVE THE DUNES.
SOME TOWNS HAVE SPECIAL BEACH AND DUNE PRESERVATION PROJECTS.


BUILDINGS ARE SET BEHIND THE DUNE.
TOWNS ARE PREPARING HURRICANE PLANS... AND CAREFULLY MAKING LAND USE AND ZONING DECISIONS.
ALL OF US ARE LEARNING MORE ABOUT HOW COASTAL SYSTEMS WORK.
SCHOOL BUS
SCHOOL
WELCOME TO OCEAN STATE PARK
WE LOVE THE BEAUTY AND POWER OF THE SEA AND DEPEND ON ITS NATURAL BOUNTY
WHAT WILL TOMORROW BE LIKE ON THE COAST? IT'S UP TO YOU, AND WHAT YOU DO TODAY!

MAN MEETS COAST

August 1980

This booklet is published in support of the YEAR OF THE COAST by the Florida Sea Grant College.

Written by Diane Barile, Florida Institute of Technology, Melbourne, FL. Illustrated by Phil Stanton, Melbourne, FL.

WHAT IS THE YEAR OF THE COAST?

To focus public attention on the value of the nation's coast and the mounting dangers of further degradation of its vitality, 1980 has been designated by the president as the YEAR OF THE COAST. During the year a large, diverse national campaign is being conducted for the purpose of educating millions of people about the importance of protecting, conserving and restoring what is perhaps the nation's greatest natural resource. In Florida, which has a 1,350 mile coastline and where no part of the state is much farther than 75 miles from salt water, pressures on the coast may be even greater. Over 30 million tourists visit the state each year, most of them ranking beaches and fishing as prime attractions and it is estimated that nearly 75 percent of those who become permanent residents settle in coastal areas.

Information concerning the coast is available from various state and federal agencies, universities and colleges, county Extension offices, private research organizations, oceanariums, local marine patrol offices and many other sources. Addresses for some of these are listed below:

STATE OF FLORIDA

Department of Environmental Regulation
Office of Coastal Zone Management
2600 Blair Stone Road
Tallahassee, FL 32301

Florida Department of Natural Resources
Bureau of Beaches & Shores
3900 Commonwealth Blvd
Tallahassee, FL 32303

Florida Department of Natural Resources
Marine Research Laboratory
100 Eighth Avenue, S.E.
St. Petersburg, FL 33701

UNIVERSITIES

Florida Sea Grant College*
G022 McCarty Hall
University of Florida
Gainesville, FL 32611

*Includes Florida A&M, Florida Atlantic, Florida International and Florida State Universities; and the Universities of Florida, Central Florida, Miami, North Florida, South Florida, and West Florida; and the Florida Institute of Technology.

Coastal Engineering Archives
Weil Hall, University of Florida
Gainesville, FL 32611

U.S. GOVERNMENT

Public Affairs Office
National Oceanographic & Atmospheric Adm
Rockville, MD 29852

NOAA Atlantic Oceanographic Meterorological Laboratories
15 Richenbacker Causeway
Miami, FL 33149

National Marine Fisheries Service--Southeast Region
9450 Koger Blvd
St. Petersburg, FL 33702

Naval Coastal Systems Center
Panama City, FL

U.S. EPA Environmental Research Laboratory
Gulf Breeze, FL

U.S. Geological Survey, Water Resources Division
325 John Knox Road, Suite F-240
Tallahassee, FL 32303

U.S. Army Corps of Engineers
P. O. Box 4970
Jacksonville, FL 32201

PRIVATE ORGANIZATIONS

Coastal Alliance/Year of the Coast
P. O. Box 2708
Washington, D.C. 20013

Florida Shore & Beach Preservation Assn, Inc.
325 John Knox Road, Suite F-214
Tallahassee, FL 32303

The International Oceanographic Foundation
3979 Rickenbacker Causeway
Virginia Key
Miami, FL 33149

Mote Marine Laboratory
1600 City Island Park
Sarasota, FL 33577

Harbor Branch Foundation
RR1, Box 196
Fort Pierce, FL 33450

OCEANARIUMS

Gulfarium, Fort Walton Beach
Marineland, St. Augustine
Ocean World, Inc., Ft. Lauderdale
Sea World of Florida, Orlando
Wometco Miami Seaquarium, Miami

Florida Sea Grant College is supported by award of the Office of Sea Grant, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, grant number 04-8-MO1-7[illegible], under provisions of the National Sea Grant College and Programs Act of 1966. This information is published by the Marine Advisory Program which functions as a component of the Florida Cooperative Extension Service, John T. Woeste, dean, in conducting Cooperative Extension work in Agriculture, Home Economics, and Marine Sciences, State of Florida, U.S. Department of Agriculture, U.S. Department of Commerce, and Boards of County Commissioners, cooperating. Printed and distributed in furtherance of the Acts of Congress of May 8 and June 14, 1914. The Florida Sea Grant College is an Equal Employment Opportunity-Affirmative Action employer authorized to provide research, educational information and other services only to individuals and institutions that function without regard to race, color, sex, or national origin.

Copies available from:

Marine Advisory Program
Florida Cooperative Extension Service
GO22 McCarty Hall
University of Florida
Gainesville, FL 32611

This public document was promulgated at a cost of $4,210, or 21 cents per copy, to provide interested persons with information about beaches, estuaries, and other areas in the coastal zone. This does not include costs for postage and handling.